Mindfulness and Young Children's Well-being in Hong Kong: A Mixed Methods Study

Maffini, Helen

Award date:
2020

Awarding institution:
University of Bath

Mindfulness and Young Children's Well-being in Hong Kong: A Mixed Methods Study

Helen Alexandra Maffini

A Thesis Submitted for the Degree of Doctor of Education

University of Bath Department of Education

April 2019

Table of Contents

List of Inclusions

Chapter 1: Introduction

Chapter 2: Literature Review

Chapter 3: Methodology

Chapter 4: Findings

Chapter 5: Discussion, Conclusions and Recommendations

List of Figures

List of Graphs

List of Tables

Acknowledgements

Thank you Giampaolo for your love and support; I couldn’t have done this without you!

I would also like to thank my daughters Alexandra and Francesca for encouraging their mum along the way!

Thank you to my supervisors Rita Chawla-Duggan and Kate Bullock for all their advice and support throughout this process.

Abstract

Research indicates that children of all ages are experiencing more stress, anxiety and depression for a variety of reasons. Schools and educators are looking for solutions to help children overcome these negative states and transition into more positive states.

Mindfulness is one area that looks promising in helping children develop higher levels of well-being and in developing positive dispositions. Preschool children enter schools with a variety of dispositions, both positive and negative, and teachers would like to further develop the more positive dispositions and encourage the development of other well-being dispositions. Mindfulness could be a way to tap into this area and help preschool children to learn and thrive.

There are limited research studies in preschools on whether or not mindfulness is beneficial, what practices are suitable for young children and what children perceive mindfulness to be.

The purpose of this study was to examine parent's, teachers' and children's perspectives of mindfulness and to explore whether well-being dispositions, including being attentive, focussed, showing prosocial behaviours and being emotionally and socially regulated can benefit from this practice.

A mixed methods approach, integrated with the Mosaic approach, took place in seven Hong Kong preschools. The study used a variety of data including surveys, interviews, children's drawings, scribed words and classroom assessments. A six-week, preschool classroom intervention brought mindfulness to life with a variety of practices for young children including breathwork, movement, awareness, and kindness practices.

Teachers and parents observed increased well-being dispositions including prosocial behaviours such as being kind and caring, feelings of increased calmness and more focus in the children. Children incorporated mindfulness themes in their drawings, including attention to breath, listening, calmness and relaxation. Children also placed themes related to kindness in their drawings, including giving, helping others, love and sharing. Self-regulation data was less convincing as the triangulated data showed a mix of outcomes.

This study contributes to the larger conversation on how mindfulness might aid in the development of preschool children's well-being dispositions, and on how children's voice might develop in future mindfulness research.

List of Abbreviations

ADAA	Anxiety and Depression Association of America
CDC	Curriculum Development Council
DAP	developmentally appropriate practice
ECE	early childhood education
EF	executive function
MBI	mindfulness-based-intervention
MBSR	mindfulness-based stress reduction
MBCT	mindfulness-based cognitive therapy
SCWBS	Stirling Children's Wellbeing Scale
SEE	Social-emotional education
SEL	Social-emotional learning
SEEW	Social-emotional educational well-being
ZPD	zone of proximal development

Chapter 1: Introduction

1.1 Overview

An increasing number of children are experiencing stress, anxiety, depression and other mental health conditions. Research discovered that rates of depression, anxiety and other mental health issues increased consistently in students in recent decades (Twenge et al., 2010). Researchers found this increase was due to varied reasons, including the drive for higher academic outcomes (Herman et al., 2009) higher test anxiety (Segool et al., 2013), overscheduling and lack of playtime (Grey, 2011). They found that the use of digital technology may also hinder a child's self-image (Twenge and Campbell, 2018).

Statistics paint a picture of increasing childhood issues worldwide. The Anxiety and Depression Association of America (ADAA) claims that 25.1% of children ages 13-18 have anxiety disorders (ADAA, n.d.). Alongside this, the United Kingdom (UK) government declared a mental health crisis in the country indicating that a third of families grapple with these issues (Mindfulness All-Party Parliamentary Group (MAPPG), 2015). Furthermore, the Young Minds (n.d.) 2018 annual report identified that mental health issues among young people doubled in the last 25 years among 5 to 16-year-olds. There are many other reports about this problem, such as a longitudinal analysis by Twenge et al. (2010), stating that since 1938 anxiety has increased over six-times in young people.

As a result, educators are searching for solutions to help students overcome these problems and to develop a greater sense of well-being (Van de Weijer-Bergsma et al., 2012). Approaches used to solve these issues include pharmaceutical remedies, such as the use of anti-anxiety drugs or other less invasive tools like cognitive behaviour therapy. These alternative approaches may be beneficial and required for certain individual students. However, when educators think of how to improve the

well-being of all schoolchildren, by reducing stress and anxiety, the search for more suitable, universal solutions in critical. Consequently, there is a plethora of social-emotional learning (SEL) and positive psychology interventions currently implemented in schools with varying success (Kyriacou, 2012; Watson et al., 2012).

Among these well-being approaches, one area that has shown great promise in helping students is mindfulness. Mindfulness is thought to be 'wellness-oriented' and is an expected human aptitude (Albrecht and Veall, 2014). In fact, mindfulness, a Buddhist construct, is now widely known in Western culture, and it is growing in recognition across many sectors of society including health, business, education and government. Kabat-Zinn, known as the father of Western mindfulness, and others, have a large body of research with clinical patients showing beneficial results (Kabat-Zinn, 1990; 2003; Segal and Walsh, 2016). On the other hand, one article claims the recent increase in admiration around mindfulness has led to 'McMindfulness syndrome', of diluting the root philosophy of mindfulness in favour of commercialism and popularity (Hyland, Lee and Mills, 2015 p.219). In agreement, Van Dam et al. (2017), stated that there is a lack of robustness and exaggerated claims permeating mindfulness research.

Nonetheless, mindfulness research in clinical settings with adults and older youth is multiplying, with more attention focussed on the research design. Mindfulness research in education is also developing at a rapid pace with a growing array of promising studies and meta-analyses (Burke, 2010; Meiklejohn, Phillips and Freedman, 2012; Weare, 2013; Black, 2016; Schonert-Reichl and Roeser, 2016; Maynard et al., 2017). However, in the overall mindfulness literature, a gap remains as there are minimal studies with young children of preschool age.

It is vital to fill this gap in the research as early childhood education (ECE) sets the stage for all future learning and is an essential time in a child's development. Children enter preschool with certain dispositions, and teachers would like to constructively enhance these dispositions, such as kindness, attentiveness and care

for others, and develop other dispositions, particularly those related to well-being. Dispositions linked to prosocial behaviours, social competence, the ability to self-regulate and focus are vital for a preschooler's overall development and growth (Katz and McClellan,1997). Moreover, the development of emotional regulation in preschool is shown to be beneficial throughout a child's schooling (Blair and Diamond, 2008). A clearer understanding of how particular aspects of mindfulness may contribute to student well-being (Ager, Albrecht and Cohen, 2015; Albrecht, 2016) may help further understanding of how students can thrive. Investigating whether a mindfulness curriculum can facilitate young children to develop positive dispositions that support well-being, is a pertinent question due to the positive benefits mindfulness is reported to have with older students.

A disposition according to Katz (1993, p.16), is a 'pattern of behavior exhibited frequently and in the absence of coercion and constituting a habit of mind under some conscious and voluntary control, and that is intentional and oriented to broad goals'. Children's dispositions are attained, reinforced, or lessened depending on the learning environment and interactions with others, including teachers, parents, and peers (Bertram and Pascal, 2002). Therefore, if educators want students to become balanced adults and lifelong learners, practices that bolster positive dispositions could be beneficial if in place from an early, preschool age (Bertram and Pascal, 2002). Research is needed to explore how preschoolers might cultivate well-being dispositions through mindfulness in a preschool setting.

The research presented in this thesis will fill in these gaps through a six-week intervention in a group of preschools to determine what parents' and teachers' perceptions of mindfulness are and how the intervention may facilitate the development of well-being dispositions in preschoolers. I will also explore the children's perceptions and voice through their drawings and their words scribed by their teachers.

Hong Kong, the context for this study, makes an interesting setting due to the reported low levels of well-being in students and the emphasis on academic success. Of late, Hong Kong suffers from increased rates of depression in students (UNICEF, 2014; Yip 2016). Hong Kong is also experiencing a period of a marked increase in the number of student suicides (Cheung and Chui, 2018; Lok-Kei, 2018). From this, researchers can deduce that levels of social-emotional well-being in the student population are of great concern and finding a solution to help students with their mental health is essential.

1.2 What is Well-being?

Although the term well-being and the concept of positive psychology are becoming more popular, there is no clear agreement on how well-being is defined. Even the word well-being is a blurred concept in the literature with Mackey (2000) stating that the use of the terms wellness and well-being in research are interchangeable.
A variety of definitions abound, for instance, Dodge et al. (2012, p.230) indicated that 'stable well-being is when individuals have the psychological, social and physical resources they need to meet a particular psychological, social and/or physical challenge. When individuals have more challenges than resources, the see-saw dips, along with their well-being, and vice-versa' while Shin and Johnson (1978, p.478) stated that well-being is 'a global assessment of a person's quality of life per his own chosen criteria'. While these definitions do not contradict each other, they emphasise different aspects. This lack of clarity is why I have chosen the broader definition from Statham and Chase (2010, p.2), as defined below, as the preferred definitional approach for this study:

> 'There is some emerging consensus that childhood well-being is multi-dimensional, should include dimensions of physical, emotional and social well-being; should focus on the immediate lives of children but also consider their future lives; and should incorporate some subjective as well as objective measures'.

This definition was chosen as it encompasses the different facets of childhood development and learning and includes both the present and futures of young children. I feel this is important, as the present moment is just as crucial as the potential future of children.

1.3 What is Mindfulness?

Despite the growing body of research and popularity, there is still no clear definition of what mindfulness is. Mindfulness is highly problematic to conceptualise within both the educational and psychological literature due to arguments between religious users and scientific researchers on what practices, processes and concepts it includes (Krägeloh, 2013). Germer, Siegel and Fulton (2005) discuss the idea that mindfulness can be denoted as a process, a practice, or an awareness while Davis and Kurzban (2012) stated that it is a method, a process, a perspective or an experience.

Harrington and Pickles (2009, p.335) sum up this 'confused concept' of mindfulness stating:

> '… mindfulness is characterized by difficulties of definitions and inherent contradictions. We are told mindfulness is a state – a set of attention skills, and a group of attitudes. We are informed that mindfulness is fundamentally a non-judgmental stance, but at the same time one that involves making judgments.'.

Many mindfulness definitions are alike, many use similar words or simply expand on common definitions more widely. Kabat-Zinn (1994, p.4), stated mindfulness 'means paying attention in a particular way; on purpose, in the present moment, and non-judgmentally'. Mindfulness, according to Bishop et al. (2004), means one self-regulates attention and assumes an accepting and open-minded outlook. Other researchers have included more aspects of mindfulness in their definitions, for example, Albrecht, Albrecht and Cohen (2012), mention that examples of

mindfulness are the moments of acceptance, observation and participation, with a position of balance or 'loving-kindness' that one encounters throughout a day. Those with a differing view of mindfulness include Langer (1992, p.289), who defined it as 'a state of conscious awareness in which the individual is implicitly aware of the context and content of information. It is a state of openness to novelty in which the individual actively constructs categories and distinctions'. In other words, Langer (1992) believes that people are either mindful or mindless in the present moment, meaning mindfulness is a cognitive construction. These definitions, although similar, also differ in some important ways that could potentially be cause for confusion.

A crucial point of confusion is understanding the difference between the words mindfulness and meditation. I believe mindfulness can be practised anytime, anywhere, and at any moment of the day, by focussing on something such as the breath or a sound. Meditation, on the other hand, is something which might encourage our mindfulness to expand and is a specific form of contemplating that one might choose to take part in at a specific time such as in a walking or sitting meditation.

The Association for Mindfulness in Education (n.d.) stated '...paying attention here and now with kindness and curiosity. Mindfulness reconnects students to their five senses, bringing them into a moment to moment awareness of themselves and their surroundings'. I chose this definition for this study as it fits well with our exploration into early childhood. In addition, this definition mentions the sensory aspect of learning which is vital for young children to learn and develop (Ayres and Robbins 2005; Hensch, 2005). In fact, the NHS Dumfries and Galloway (2016, p.7) indicate that 'sensory development is fundamental to a child's health and well-being'. This definition encompasses aspects of exploring the self and the environment and fits well with this exploration into preschool dispositions and well-being.

1.31 Benefits of Mindfulness in Schools

Mindfulness research in educational contexts shows a range of benefits associated with both well-being and academic outcomes (Flook et al., 2010; Weare, 2013; Van de Weijer-Bergsma, 2012; Maynard et al., 2017), resulting in many educators becoming interested in this topic. Some of the benefits discovered include students being able to connect with the learning environment (Campion and Rocco, 2009), greater executive functioning (EF) (Flook et al., 2010) lower stress, anxiety and depression (Kuyken et al., 2013; Bluth et al., 2015) and increased focus and attention (Napoli, Krech and Holley, 2005). Furthermore, researchers note that students who practise mindfulness are more relaxed and calmer (Wall, 2005), and experience positive improvements in their psychological health (Schonert-Reichel and Lawlor, 2010). Others, such as Lutz et al. (2008), have found that mindfulness training allows for higher levels of emotional regulation and better attention spans due to the capacity to retain engagement of the self-regulatory neural circuits. I explore these benefits in further detail in Chapter 2.

1.4 Rationale and Significance

Educators worldwide have debated best practices for centuries. How can children learn best? What strategies work best? Despite the growing base of literature, researchers have not yet adequately explained how mindfulness can help children to thrive and develop more fully (Flook et al., 2010). Researchers such as Zenner, Herrnleben-Kurtz and Walach (2014) conducted meta-analyses on the evaluation of mindfulness interventions in school settings, finding that there are many different types of outcomes and varied programmes, therefore, determining which mindfulness programmes are most effective is a difficult task. Additionally, the fact that many studies are of an experimental or preliminary nature also clouds the conclusiveness of the research findings (Khoury et al., 2013). Due to this lack of clarity and robustness in the literature, there is a need for more school-based mindfulness studies. In particular, intensifying the currently minimal research undertaken on mindfulness in children's early years is crucial.

There is great promise regarding the benefits of mindfulness in many different environments discussed in the literature (Weare, 2013; Black, 2016; Zenner, Herrnleben-Kurz, and Walach, 2014; Maynard et al., 2017), so scholars are right to delve in deeper and see how these practices might help the mental health of schoolchildren. This study will contribute to the overall body of literature on mindfulness and well-being as well as help provide a more comprehensive study into preschool mindfulness education. Early childhood proponents, including myself, will argue that all learning starts with the child. Children come to preschool with a range of developing dispositions, and it is the educators' task to develop these further, with a particular focus on well-being. Researchers might benefit from examining how natural dispositions that children have can develop, and how the disposition of mindfulness itself might be cultivated in preschool classrooms through a mindfulness curriculum. I will also explore what types of mindfulness practices may be most appropriate for preschool children.

In Hong Kong, there are many concerns about student well-being and little research about mindfulness in schools, so this study may provide information to fill this gap in the literature. The findings from the current thesis may able to be applied to the broader context of Hong Kong preschools and also to preschools around the world. The goal is to further explore strategies to help students develop mental well-being, underpinned by mindfulness, which will hopefully support the development of positive childhood dispositions.

1.5 Conceptual Framework

1.51 Constructivist Epistemology

The conceptual framework for this research study assumes a constructivist approach. Vygotsky, a Russian developmental psychologist, is an important figure in ECE, although his work crosses many age ranges. Vygotsky's (1978) link to constructivism relates to theories he developed regarding thought, language, and

how they apply in society. Vygotsky's stance was that children progressively internalise social and external events, as well as communication, alongside others who might be more competent. Vygotsky (1978) identified the 'zone of proximal development' (ZPD). This 'zone' represents the space where children, through social interactions with more competent others, co-construct knowledge and experience cognitive development.

Vygotsky's theories regarding the facilitation of children's emotional learning relate to this study. From these theories, researchers can imply that children would learn about developing their emotional skills from role models, be they children or adults. This fact is a significant aspect in the delivery of mindfulness in schools and would be of high importance when creating programmes and thinking about what moment to moment mindfulness looks like during the day. Also, Bodrova and Leong (2005 p. 32) whose work follows and is linked to self-regulation in children, indicate that 'self-regulation is a deep, internal mechanism that underlies mindful, intentional and thoughtful behaviors of children. It is the capacity to control one's impulses both to stop doing something (even if one wants to continue doing it) and to start doing something (even if one doesn't want to do it)'. Woolfolk (2013) believes that constructivism places the student's efforts to understand, at the core of their educational journey. Therefore, educators might think of the points of reflection available to children in their emotional development and researchers may wish to investigate this further.

1.52 Systems Theory

Most well-being theories include ideas linked with systems theory and this is thought to be beneficial insofar as it helps us to frame problems, to understand the bigger pictures and helps us to analyse how people might interact from different perspectives (Albrecht and Veall, 2014; Albrecht, 2016). Also, systems theory encourages a flexible approach to examining multifaceted ideas, for instance, the interaction of the many aspects concerning the implementation of a mindfulness programme in a school (Albrecht and Veall, 2014), such as the one in this study.

Bronfenbrenner holds one such systems theory, named the ecological systems theory, linked with the environment. The layers of the environment he introduces are the microsystem, mesosystem, exosystem, macrosystem and chronosystem (Bronfenbrenner,1994). Each of these layers works with others to create circumstances and opportunities or threats to a child's development. More discussion follows in Chapter 2.

1.53 Mosaic Approach

The Mosaic approach is a way to construct an understanding including the young child's perspective in research (Clark, 2005; 2017). The approach involves three stages, children and adults gathering documentation, reflection and finally, interpretation and discussion (Clark, 2017). More discussion on this approach is in Chapter 3.

1.6 Research Overview

This thesis explores how mindfulness may influence preschool children's well-being in a Hong Kong preschool context. It seeks to interject new knowledge through its exploration of aspects of students' social-emotional well-being (SEW) and development of relevant dispositions after a mindfulness-based curriculum intervention.

Hong Kong is a small island belonging to China, that was under British rule for 99 years until 1997. In the current one country, two systems backdrop, Hong Kong functions separately regarding educational management, regulations and guidelines. The preschools in this research project are all under the regulation of the Education Department and are typical of Hong Kong 'international' style kindergartens which are attended by mostly Native Hong Kong Chinese children.

1.61 Research Questions

The questions I investigated were:
1- How does mindfulness facilitate the development of children's well-being dispositions in a Hong Kong international preschool context?

2- What are the perceptions of teachers and parents in a Hong Kong international preschool context relating to mindfulness and its influences on children's well-being dispositions?

3- How do preschool students in a Hong Kong international preschool context perceive the ideas of mindfulness and kindness?

1.62 Overview of Research Design

This study uses mixed methods. I selected this approach because, while a positivist epistemology supports many school-based mindfulness interventions, I believe many questions are left unanswered and a more interpretive, qualitative approach is needed to triangulate and further understand any quantitative results. As a former teacher, I often had used more positivist approaches in schools for assessment and other types of documentation and felt they often missed the whole picture of the child. Thus, I felt it is important to be able to benefit from the measurable information one can glean from quantitative tools, yet to be able to go in deeper and explore further meaning through a constructivist approach. I believe this pragmatic mixing of paradigms allows for a complete picture to emerge in a complex environment, like a preschool. Hargreaves (2007), stated that a common criticism of research in education is that researchers, rather than people working in the field conduct it. As a result, it does not produce solutions that can develop into effective practices within classroom settings. My hope is that this research will be pragmatic and conclude with helpful reflections that will enable children in Hong Kong to thrive and flourish.

A two-phase sequential mixed method design frames this research. A mixed method (Leech and Onwuegbuzie, 2002) methodology allows for quantitative and

qualitative data to be gathered and analysed from different perspectives to draw firmer conclusions and to triangulate findings. In this case, quantitative data are analysed then compared with the qualitative data and work together to explain the results. In other words, the quantitative data will indicate the wider, broader issues and the qualitative data will give a deeper understanding to why those issues might occur and delve into the stories around those issues and ideas. This allows for greater breadth and depth in the research.

I chose to include parents' and teachers' views in this study for several reasons; one is to provide an investigation into the whole context that included those closest to the child both at home and at school, offering several perspectives and richer data about the whole child and a link to Bronfenbrenner's ecological systems theory. Parents viewpoints are essential in the early years as they are the child's first teachers while school teachers' and other educators are also critical to the well-being growth and development of young children. I include both stakeholders' voices to determine if their viewpoints align, but also to see and learn more about how both perceive mindfulness in the development of a child's dispositions and how this might influence childhood well-being.

Children's viewpoints are often missing in educational and mindfulness research (Ager, Albrecht and Cohen, 2015), but I feel it is vital to include these, especially for our youngest students who often do not have the opportunity to share their ideas and opinions. I use an analysis of children's drawings from their classroom journals and an adapted version of the Mosaic approach to understand the child's viewpoint in this intervention and combine these with the perceptions and observations from parents and teachers.

I explored the influences of a six-week mindfulness curriculum intervention for preschoolers in Hong Kong and measured what, if any, influences mindfulness produced on children's well-being dispositions. The MindBE curriculum design is a bespoke curriculum for the group of schools in this study. The implementation of the

MindBE curriculum in this study uses research-based strategies suggested by Zelazo and Lyons (2012, p.157) such as 'noticing one's moment-to-moment experiences, monitoring attention, redirecting attention when it has wandered, and non-reactively observing one's thoughts and feelings' which is the reflexive process of learning about emotions to help develop children's positive dispositions. Additionally, the curriculum incorporated research from Burke (2010), indicating that activities adults use in mindfulness, such as breathwork is recommended to be much shorter due to children's imperfect self-regulation skills. Chapter 3 contains details about the curriculum and the intervention.

1.63 Role of the Researcher

I have worked occasionally with this group of schools and others in their network for the past five years. My role is to help change and develop the curriculum into a more play-based, child-centred one, using small specific steps including teacher and parent training programmes, curriculum design and programme development, lesson observations and staff development, as appropriate. As I am an 'insider' in these local preschools, I can work closely with this group of children, educators and parents. I made every effort to remain impartial and show reflexivity during this study and examine the data from numerous angles, forming a triangulated conclusion. Cohen and Crabtree (2006) describe reflexivity in research projects as encompassing three ideas: a) including multiple researchers, b) keeping a research journal and c) noting your perspective in any publications or reports. Using these ideas helped me to be consciously aware throughout the research of my possible biases and preconceptions. I kept a detailed research journal, which is one idea suggested by Lincoln and Guba (1985), to ensuring reflexivity, where I reflected and noted my observations and thought about how I might present bias in different instances. This journal, where I recorded my decisions, thoughts, reasoning and reflections clarified my own reactions and expectations as the research took place and adjusting where need be. Next, although I was the only researcher in this project, another way of bringing reflexivity was to obtain the perspectives of others over the course of the study, which I did by reaching out to other researchers,

educators, authors and my supervisors throughout the research process. Finally, my intention in writing this thesis is to clearly describe any preconceptions I hold throughout the study and to also do so in future publications. This is discussed further in chapter 3.

1.7 The Organisation of the Dissertation

Chapter 2 is the literature review which initially considers a brief background of mindfulness. I review Bronfenbrenner's ecological systems theory, before investigating the Hong Kong schooling context, to give readers an insight into the culture and background. Next, I explore the research about ECE, well-being, social-emotional learning (SEL) and positive psychology. Next, I examine the current research in schools related to mindfulness interventions studying preschool, primary and secondary students and then discuss the merits and limitations of these programmes. Finally, I discuss and critique developmentally appropriate practice (DAP) and how mindfulness might be taught in early years' settings.

Chapter 3 covers the methodology of this research and describes the methodological and philosophical assumptions behind this thesis. I describe and analyse the design used and its strengths and weaknesses. I examine the data collection methods employed in this study in detail, along with their limitations. Lastly, I provide an explanation and critique of the methods and tools applied in the analysis of the data.

Chapter 4 is the findings chapter and discusses data, results and analysis associated with the research questions. I discuss both quantitative and qualitative data, presented from three parties, parents, teachers and children. I present the collection and interpretation of these findings before I triangulate and synthesise the findings.

Chapter 5 offers my discussion, significant findings, conclusions and recommendations referencing the literature review and the methodology of this study. I include a review of the possible issues of this study. Next, I examine the

research conclusions and review the contribution this thesis has made to the field. Finally, I give my recommendations and make suggestions for future researchers to explore.

Chapter 2: Literature Review

2.1 Introduction

Research into the subject of mindfulness consists of an exploration of the practices and their effectiveness in various contexts, how it can be measured accurately and how it links to both improving our general well-being and decreasing ailments such as stress, anxiety and depression (Baer, 2003). Examining the research is challenging because of the lack of clear definitions as to what mindfulness is and is not, the varied conditions in schools where interventions are happening and the disjointed research, due to competing definitions and criticisms owing to lack of robustness in the research.

One area of mindfulness research that appears stronger is in clinical settings. Research in this area now generates thousands of studies and is a result of decades of growth (Creswell, 2017). These studies often examine the consequences of Mindfulness-Based Stress Reduction (MBSR), which is an 8-week intervention programme, Kabat-Zinn created for people with stress-related disorders and persistent pain. Kabat-Zinn (1990) offered some explanation as to how mindfulness helps patients become present with their pain. Other clinical training programmes in the literature include Mindfulness-Based Cognitive Therapy (MBCT) developed into a similar 8-week course to use skills of attentional control to prevent setbacks in the process of recovery from depression (Segal et al., 2002). Research demonstrates that MBCT can improve mood, reduce stress and enhance attentiveness (Teasdale, Segal and Williams, 1995). Both these programmes require teachers of the programmes to have extensive personal practice along with professional training (Burke, 2010).

Due to the widespread positive media coverage and some of the benefits shown in clinical settings, many educators became curious about using these practices with children, not only to help students suffering from specific issues but also to promote general well-being in schools. This enthusiasm resulted in studies that examined

both mindfulness-based interventions (MBI) with students with challenges, but also the introduction of universal programmes that hope to improve all children's well-being.

I begin this chapter with an overview of the ecological systems theory which helps to frame the study and to analyse the different systems that influence a child's well-being. This is followed by an overview of the context, Hong Kong, and the stress that children are under in this locale. This section includes a discussion of the Confucian and Western educational beliefs, the ideals behind quality education and curriculum models in the area and some of the stressful experiences prevalent in Hong Kong preschools. Next, I look at ECE and discuss the development of childhood well-being dispositions and why they are vital to bringing in Vygotsky's theories and his zone of proximal development (ZPD). I then explore well-being in schools, including social-emotional learning and positive psychology, and how well-being links to mindfulness. Finally, I explore a brief summary of the general literature about mindfulness, and an overview of the research in clinical settings and schools, including the minimal research on mindfulness in preschools.

2.2 Ecological Systems Theory

Goodman and Kaiser-Greenland (2009) remind researchers and educators that a systems perspective is critical when discussing mindfulness with children. A child's perspective is rooted in a family system. The family system is the relationship between a child and his or her parents or other relatives and can significantly influence the child's experience not only at home but at school and in the world in general (Bronfenbrenner, 1994).

A thorough understanding of family systems is important as the 'benefits from mindfulness-based therapy is highly associated with the amount of parental involvement' (Semple et al., 2006 in Goodland and Kaiser-Greenland, 2009 p.421). Besides, when researchers look at results in the area of SEW, they may benefit

from examining and considering what other outside forces are influencing the findings, as children's lives are complex (Harnett and Dawe, 2012).

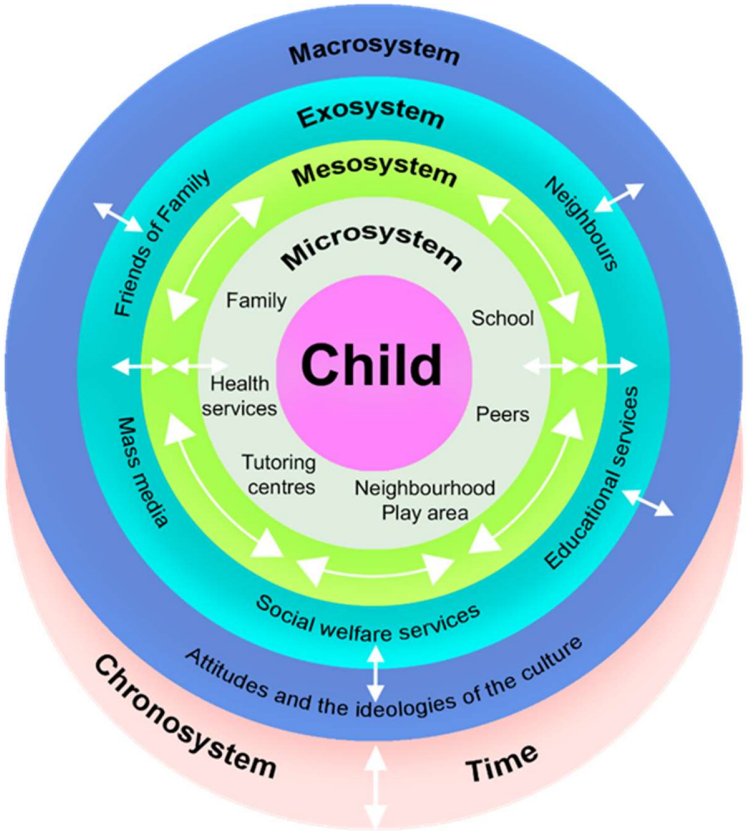
Bronfenbrenner's ecological systems theory includes six levels working in tandem: the individual, the microsystem, the mesosystem, the exosystem, the macrosystem and the chronosystem (Hayes, O'Toole and Halpenny, 2017). The child is at the centre of the system. The microsystem includes people who are close to the child such as parents, siblings, and teachers. This system has a powerful and direct effect on the child's daily life. The mesosystem is the interaction of two microsystems such as the school and the family. In the early years, both home and preschool interactions are critical. The exosystem is the link between those a bit further away from the child but who still influence the child, for example, the preschool owners or directors, a parents' workplace or a cleaning company at the school. The macrosystem focuses on a cultural level, and although removed from the child directly, it is part of the sociocultural beliefs and values of early childhood in each context. Finally, the chronosystem is linked to time and how time influences each of the other systems. Later, Bronfenbrenner added layers he called proximal processes to explain the interrelationships between people, process, context and time (Hayes, O'Toole and Halpenny, 2017). Figure 1 displays a visual representation of the model.

The chronosystem links directly with the language used in mindfulness about present moment awareness:

> Focusing on the present moment allows development of meaningful engagement and extended learning, the present moment, micro time within Bronfenbrenner's chronosystem, is that moment to moment connection where sustained shared thinking can occur -where the adult sets the scene for children's engagement with the world. (Hayes, O'Toole and Halpenny, 2017, p.112).

On the other hand, there are critics of the theory who state that it is too complex to work in real environments (Taylor, 2016). As the theory alludes to the fact that all the layers need to be taken into consideration, even instances that may seem trivial or unimportant are to be included as a piece of the multifaceted system (Watts, Cockcroft and Duncan, 2009). Taylor (2016) also states it is challenging for educators or other adults working with the data to find a hierarchy or knowledge of how to weigh the different information, for example, would the relationships in the microsystem have a stronger influence than those is the mesosystem or vice-versa?

Figure 1- Bronfenbrenner's Ecological Systems Theory Model



Microsystem is the immediate environment- e.g. family, preschool, friends, teacher

Mesosystem is the connections between the immediate environments - e.g. parents talking to the school

Exosystem is the external environments that indirectly affect the child - e.g. a parents' workplace in which the parent feels stressed

Macrosystem is the wider cultural context -e.g. the culture and the expectations of that culture

Chronosystem is about time, such as the moment to moment connection where sustained shared thinking can occur.

Model Adapted from Hayes, O'Toole and Halpenny (2017)

2.3 Hong Kong Context

As mentioned in Chapter 1, Hong Kong students currently experience low levels of well-being and highly competitive academic environments (UNICEF, 2014). Moreover, the increasing number of suicides in Hong Kong, particularly of students, is a growing concern (Sun, Hui, and Watkins, 2006; Zhang, 2018). Therefore, I propose that educators would benefit from developing skills to manage these obstacles and create a better sense of well-being in Hong Kong's children from a young age and that more research is needed to discover the best way to do so. This study intends to help fill this gap in the literature.

2.31 Hong Kong's ECE Sector

Hong Kong parents prioritise their child's education as a significant concern, as evidenced by the fact that nearly all young children join some form of schooling after they turn 2 or 3-years-old (Rao and Li, 2009). The law in Hong Kong stated that children are required to attend formal schooling from 5.8 years of age; however, nearly 95% of 3 to 6-year-old children attend preschool (Rao and Li, 2009). In fact, young children, some as young as 6-months-old, are offered tuition for math classes, language and science after their regular school day and on weekends (Wong and Rao, 2015).

Curriculum Development Council (CDC), (CDC, 2006), created the *Guide to the Pre-primary Curriculum* and advised all kindergartens to follow its guidelines which indicated that pre-primary education is intended to nurture children's holistic development. However, the guide also mentions that kindergarten is meant to prepare children for formal schooling, which in some instances may be confusing for educators who have little training (Rao and Li, 2009). Further guidance from the Hong Kong Education Department included the *Performance Indicators for Kindergartens* (Education Department, 2001), which listed the features of high-quality centres and urged preschools to conform to these. Also issued was a list of do's and don'ts for Kindergartens (Education Department, 1999), outlining what

appropriate and inappropriate curriculum content and teaching methods were thought to include.

2.32 A Cultural Overview of Hong Kong's Schooling

To examine high-quality ECE in Hong Kong, an awareness of the culture is important (Rao and Li, 2009). Additionally, the National Research Council and Institute of Medicine (2001) finds that all features of human development are shaped by culture, including the beliefs and practices around childrearing. Through watching, observing and taking part in life, a child absorbs the culture from what they encounter each day (Head Start Resource Center, 2008). Moreover, Rogoff (2003) stated that once children enter preschool, they are well-informed about their family's cultural norms in everyday life, while others (Tobin, Wu and Davidson,1989) stated that for children, preschools are the primary places for the continuation and transmission of culture. Indeed, the way adults plan lessons, interact with children and manage their classrooms and their students' emotional growth are all rooted in their beliefs and cultures (Head Start Resource Center, 2008). However, Chavajay and Rogoff (1999) find that the understanding of culture exists on different levels, and culture alone cannot illuminate the entirety of a person's or a group's behaviours, actions and outlooks. When researchers take into consideration culture surrounding Hong Kong's preschools, the mix of ideas that have formed, from years of British rule to the Confucian culture, and norms that permeate society are important considerations. Ecological systems theory is also important to consider here, in that there are many influences on a child's life and well-being, ranging from the macrosystem to the microsystem.

2.33 Confucian Beliefs and Western Influences

Chinese parents place a high value on education and the integration of Confucian beliefs in Chinese students (Watkins and Biggs, 2001). This value is evident in the Hong Kong education system. These Confucian beliefs, such as academic focus and diligence in academic work (Watkins and Biggs, 2001), have led to Hong Kong

preschools having a strong emphasis on structured lessons, bookwork, significant levels of respect for teachers and an undue emphasis on performance in exams (Lee, 1996). Also, the Confucian system has a unique view on failure, that it is a lack of effort, not ability, that causes failure, and the only remedy is believed to be more resolve (Chao, 1994). This assumption makes schooling even more vital in the eyes of parents.

Although parents would like their child to be happier, researchers have noted that they are not willing to lower their standards of academic schooling, to achieve this obsession with grades and achievement, even in preschool, and may pressure teachers to teach in more formal ways (Chan and Chan, 2003; Yuen and Grieshaber, 2009; Fung and Lam, 2012). Another point is how Chinese parents see emotion. Bond (1993) states that the Chinese view on emotions, is the expectation that they are less intense and less public than Western emotional outlooks. This outlook may seem surprising due to the influences from Hong Kong's British rule; however, despite the integration of many Western aspects of schooling into the education system, the values of academic achievement are rooted in Chinese culture (Hue, 2007).

Although ECE reforms have tried to bring in Western training and assumptions of DAP, it has not worked well due to the deeply rooted Confucian beliefs of parents and some school leaders (Pearson and Rao, 2006). The deep beliefs ingrained in Hong Kong society that children learn while they are young about concepts such as self-discipline, good behaviour and obedience, leave Hong Kong kindergartens in a state of flux between Confucian and Western practices (Pearson and Rao, 2006; Yuen and Grieshaber (2009).

In fact, Hong Kong has an extremely competitive educational setting, with a focus on exam results and high performance (Watkins and Biggs, 2001). Demand for kindergarten places has led to the common practice of entrance examinations in most preschools (Rao and Li, 2009) with children who are not the top academic performers- in terms of naming letters, counting or making a puzzle, receiving polite

rejection letters from preschools. Moreover, researchers (Chan and Chan, 2003; Pearson and Rao, 2006), found that most people in Hong Kong believed that it was the responsibility of kindergartens and childcare centres to lay the groundwork for primary schooling, increasing its importance. Consequently, government officials discovered that kindergartens and preschools concentrated mainly on conventional scholastic outcomes and employed inappropriate instructional approaches with young children (Chan and Chan, 2003).

Within Hong Kong preschools, there are still schools asking students as young as 3-years-old to copy Chinese characters during the school day (Li and Rao, 2000), however, with ECE teacher training this practice is becoming less common (Rao and Li, 2009) and Rao et al. (2003) pointing out that that government guidance states 3 year olds should not write. In Western education settings, most teachers would oppose this approach; however, the researcher's consideration of the cultural assumptions linked with DAP is important. Even today many traditional Hong Kong parents maintain their perception of preschools as training for primary education (Ho, 2008), and in fact, the government bodies have named this 'pre-primary education' while still asserting that preschool children can flourish with a balanced curriculum (Ng and Rao, 2005; Rao 2010).

When preschools put more energy and weight towards academic learning, schools may overlook essential childhood dispositions and skills, especially those linked with social-emotional well-being. Alarmingly, Hatch (2002) found that children might lose the dispositions needed to learn, when teachers teach in a decontextualised manner instead of nurturing development through more meaningful activities.

2.34 Curriculum Models and Quality Education in Hong Kong

The holistic view of the child is essential when it comes to ECE and influences the kind of curriculum provision for many models. Despite several attempts by both the pre and post-colonial governments to bring in a more holistic ECE offering, Li and Rao (2000) indicated inadequate levels of teacher training have stifled efforts. However, standards for quality across cultures may not be relevant, and no one has

developed a single model of high-quality early years' provision that everyone agrees is acceptable (Dahlberg and Moss, 2005). Quality education in ECE is under a long-term dispute although there are many good quality evaluative scales; however, the issue is that scholars do not agree on what quality means in different cultures and contexts, and therefore it is impossible to reach a consensus on the qualities desired or determined for a universal framework of quality in ECE (Viruru, 2001; Penn, 2005; Chawla-Duggan, 2016).

Differences in curriculum models reveal different views and beliefs around what people believe is critical for preschoolers to learn, and the beliefs adults have about how a child learns and moves forward in their learning (Goffin, 2000). The teachers' role, the focus of the curriculum, the class organisation, and how children participate in the learning are all decided by these beliefs (Goffin and Wilson, 2001). For example, Friendly, Doherty and Beach (2007) conducted a study that looked at preschools in Sweden and South Korea and found national preschool curriculum models, and the notions of quality within them, differ due to cultural expectations linked to both the viewpoints of the child, parenting, and childcare beliefs.

Quality education in Hong Kong has varied interpretations. Legislators lean more to a Western idea of high quality (Rao et al., 2003), as one can see from this statement:

> Quality kindergarten education should be aligned with primary and secondary education to foster in children a balanced development in the domains of ethics, intellect, physique, social skills and aesthetics, thus achieving the goal of whole-person education. (Curriculum Development Council, (CDC), 2017, p.7)

Researchers (Rao and Li, 2009;Rao 2010) stated that the Hong Kong government had improved the quality of early childhood provision over the last ten years with a variety of reforms and other steps. However, teachers, principals and directors differ in their attitudes and beliefs, and therefore there are many different types of

preschool curricula on the market. Although Hong Kong has attempted to reform its ECE offering several times, the curriculum still focusses on academic aptitudes, and classroom teachers regularly take a formal approach to lesson implementation (Wong and Rao, 2015). With conflicting messages and practices, Hong Kong preschools still focus on reaching excellent academic benchmarks; thus, it is debatable whether the current preschool system provides the children of Hong Kong with the opportunities for a stress-free, enjoyable and educational time before entering primary schools, although Yuen and Grieshaber (2009) found many parents say they want this for their child. All of these factors affect children's social-emotional well-being. Researchers discovered that there are possible adverse outcomes linked with decidedly academic, formal preschool classrooms (Schweinhart and Weikart, 1997; Marcon, 1999). I would argue that Hong Kong children need more resources to support these turbulent times, especially as they transition from preschool to primary schooling.

2.35 The Transition from Preschool to Primary School

The transition from preschool to primary school encompasses all the ecological systems, but particularly chronosystem and the mesosystem (Hayes, O'Toole and Halpenny, 2017). Chun (2003) demonstrated that one of the main complications regarding transitions from Hong Kong kindergartens to primary schools is the clear educational disjointedness with preschools not learning about the expectations of primary schools and primary schools not informing kindergartens of the process once the students enter grade 1. In fact, as soon as children start primary school, there is a clear academic direction (Rao et al., 2003).

A preschools' past acceptance records, to what are considered elite schools, is often a criterion when parents are choosing preschools (Rao and Li, 2009). Parents of children in preschools perceive this time as preparation for primary school and place a vast amount of pressure on preschools to provide academic preparation for children to learn more and learn earlier (Pearson and Rao, 2006). In fact, research into two ECE centres, undertaken by Ho (2008), found that even though the parents

interviewed would prefer an enjoyable, play-based preschool for their children, they felt concerned whether the 'learning through play' curriculum was sufficient preparation for primary school.

There is tremendous pressure and competition for places at the top schools and that parents are taking their children to more interviews than ever before and due to the competitive nature of primary school admission, some ECE educators try to support their students by teaching a highly academic curriculum (Chan and Yeung, 2013). In agreement, Ho (2008) found that preschools offer heavily structured learning without play opportunities. Chan and Chan (2003) noted that many preschools feel obliged to cater to parents' wishes for academically focussed, teacher-centred learning that prepares students for primary schools.

2.4 Early Childhood Education

2.41 Developing Positive Dispositions

Researchers know that to strengthen children's well-being, educators work on the dispositions that connect with well-being (Katz,1993) is vital. However, within the literature there are many ways in which dispositions are described; for instance, the Te Whäriki curriculum, from New Zealand, stated 'knowledge, skills, and attitudes combine as dispositions, "habits of mind" or "patterns of learning".' (Ministry of Education, 1996, p.44). Ritchhart and Perkins, (2000 p.30), on the other hand, stated 'the notions of dispositions address the gap between one's abilities and one's actions, between a temporary facilitative state and a consistently enabling trait' which aligns well with the definition of mindfulness chosen for this study. Carr (2001, p.21), on the other hand, describes dispositions as 'participation repertoires from which a learner recognises, selects, edits, responds to, resists, searches for and constructs learning opportunities'. These descriptions are all similar and focus on the patterns of behaviour young children develop and learn. Many of these definitions mentioned 'habits of mind', which link to attention and cognitive outcomes, and are also descriptions used to frame mindfulness.

It is vital to develop and value children's well-being and note that educators perform an essential role in developing positive childhood dispositions. Children need more practice and opportunity to learn these well-being dispositions (Carr, 1995). This focus and opportunity in the classroom will create robust neural pathways that will then construct the cognitive and social capabilities that fortify a child's well-being (National Scientific Council on the Developing Child, 2004). In effect, school environments are crucial to whether and how children develop specific dispositions. For example, Ros-Voseles and Fowler-Haughey (2007) advocate nurturing positive dispositions by creating environments that encourage them in schools, and Kirby and Lawson (2012) assert that dispositions are malleable and can be activated and heightened with external forces and exposure, such as through education. Bronfenbrenner stated there is a reciprocity in childhood dispositions with other systems, that is the way a child sees the world and therefore acts influences the way people or systems respond, influencing the development of dispositions (Hayes, O'Toole and Halpenny, 2017).

Research with young children and dispositions explore areas such as children's social competence, prosocial abilities, empathy and kindness (Carr 1995; Bertram and Pascal, 2002). Furthermore, Bertram and Pascal (2002) reported that when teachers learn how to develop dispositions to promote social competence and other well-being aspects, which in turn will help develop successful learning skills. In fact, dispositions are connected to our mindsets, emotions and our visions of 'possible selves' (Carr, 1995, p. 4) and could help children to develop with what Katz and McClellan (1997, p.7) stated as 'the tendency to be accepting, friendly, empathetic, generous, or cooperative'.

These viewpoints indicate that mindfulness initiatives could be valuable in preschool settings, especially as mindfulness research is linked to increased kindness, empathy and acceptance (Weare, 2013; Flook et al., 2015). In fact, Brown, Ryan and Creswell (2007), suggested that mindfulness may be a natural human disposition that positively supports emotional well-being. I believe the mindfulness disposition can be nurtured and developed by providing child-centred mindfulness

practices and opportunities in preschools. In fact, the importance society gives to different dispositions and the opportunities that young children are then afforded at home, school and in the world due to their perceived importance is to be considered.

It is also essential to keep in mind the ecological systems theory, discussed earlier in this chapter, and how the multilayers of society might impact the development of dispositions. At the same time, one should be aware of the limitations of this model. Although the model helps to make connections between contexts in a child's life, it does not inform researchers about the child's learning.

2.4.2 How the Dispositions for this Study were Selected

In deciding what dispositions to examine for this research, I had to be quite selective in order to keep the research project manageable and focused. Therefore, I chose those dispositions that I believe are critically important to develop in the early years with research to support them with long-term studies. The dispositions I chose to examine are self-regulation, being attentive or focused, social and emotional competence and prosocial behaviours including empathy and kindness.

Self-regulation is an important competence for all preschoolers. For example, children who do not learn to self-regulate their emotions at age four are shown to be worse off as they grow up, with poor effects lasting for many years. There are many long-term research studies showing the importance of self-regulation for young children, for example, those who cannot self-regulate are less likely to follow a teacher's directions at age six and less likely to reflect on their learning in high school (Bodrova and Leong, 2005). Therefore, I thought was crucial to examine more deeply.

It is also important to note that many of these dispositions overlap in some way, for example, self-regulation and attention, although linked, are distinct. Attention is a keyword used in the mindfulness research (e.g. Baer et al., 2006) and in many

definitions of mindfulness (e.g. Kabat Zinn, 1990) and although attention may overlap with some parts of self-regulation, attention can be seen as different and therefore was important to discuss separately from self-regulation. For example, attention may include acquiring then keeping a state of alertness, adjusting to situations linked to the senses, and voluntary restraint to responses (Posner, Rothbart, and Rueda, 2014) while self-regulation definitions generally do not include areas such as maintaining an alert state or adjusting to sensory situations, however, self-regulation definitions do often include the third element, voluntary restraint (Bodrova and Leong, 2005). From these examples, we can see how difficult it is to find any skills that do not overlap in both the research and many of the measures used in research.

Self-regulation and emotional competence also offer some overlap though distinct in the research. For example, although preschoolers need to develop emotional competence (Denham 2006), which is knowledge of the emotions of self and others, and the regulation of emotional expressiveness and experience (Denham et al. 2012), self-regulation, on the other hand, is broader and defined as the ability to control and manage emotion, cognition, and behaviour (Diamond 2006). Researchers such as Housman (2017) note some similarities between the two ideas but consider them distinct areas.

Preschoolers who developed dispositions of kindness, empathy and concern for others exhibited benefits over 20 years later in one largescale study. In fact, those who could share and help others were more likely to graduate, hold steady jobs and were less likely to need government assistance or be in trouble with the law later in life (Jones, Greenberg and Crowley, 2015). Other aspects of prosocial behaviour taught in preschool have led to higher grades and standardized test scores later in life as well as better relationships with classmates and teachers (Wentzel, 2013). Another example is that preschoolers ability to regulate emotions is linked with early academic success (National Scientific Council on the Developing Child 2004) and so the regulation of emotions was also important to examine.

Similarly, prosocial behaviour and social competence also offer overlap. Prosocial behaviour is 'voluntary actions that are intended to help or benefit another individual or group of individuals' (Eisenberg and Mussen 1989, p.3) and includes things like sharing, helping and caring for others. On the other hand, social competence includes ideas such as creating positive relationships with others, maintaining close friendships, and being able to socially adapt to different circumstances (Orpinas, and Horne, 2010). Despite these overlaps in definitions, I am confident that each area of these areas will provide the research with an array of informative data to analyse.

Finally, in this research, I chose to examine only those dispositions that had two or more research studies showing these dispositions or related skills as outcomes in research with MBIs and children below the age of 12. The currently available research in children, including primary school research, into mindfulness, highlights that improved prosocial behaviour, emotional competence, attention, self-regulation and social competence are benefits from a mindfulness practice with children from ages 5-12 year age range (see Bubela and Gaylord, 2014; Mische Lawson, Cox, and Labrie Blackwell, 2012; Thierry et al., 2016) and so I decided since they are all crucial to early childhood to examine this premise with preschool children.

2.42 Vygotsky, Attention and the Zone of Proximal Development

Vygotsky established that young children could construct their own understandings through relationships with the many environments they interact with daily (Hayes, O'Toole and Halpenny, 2017). His theories emphasise how children make meaning through social interaction and how this contributes to the development of cognition (Vygotsky, 1978). Vygotsky (1978) believed that preschoolers learn through social interaction with an adult or peer that has more knowledge than the child. Adults model behaviours, skills or attitudes that then encourage a student to learn through a form of dialogue, known as collaborative dialogue (Vygotsky, 1978). Vygotsky believed that the child strives to comprehend what is happening via the mentor and

then internalises the information, guiding or regulating their learning. An example of this comes from, Goodman and Kaiser-Greenland (2009, p.421), who stated:

> ‘Mentors with a visceral understanding of impermanence will model how to relate to emotions as impermanent states, inside and out. Practising mindfulness, children and their mentors see together how emotions arise with each moment of experience, in a continuously flowing, changing stream. Through relationships with a mentor who sees through the lens of impermanence, children can learn to experience difficult emotions as transient and situational, rather than a permanent condition intrinsic to them’.

Similarly, Rose, Gilbert and Richards discussed how mirror neurons might help young children to learn from their teachers or other adults, for example, by role modelling empathy (2016). Vygotsky (1978, p.57) noted, ‘every function in the child’s cultural development appears twice: first on the social level, and later the individual level; first, between people….and then inside the child’.

The space between what the child might do independently and what the child might achieve with a mentor helping them is known as Vygotsky’s zone of proximal development (ZPD). A mentor is usually an adult, but peers could also be included in this category. Vygotsky (1978, p.83) asserted that, ‘Learning does not alter our overall ability to focus attention but rather develops various abilities to focus attention on a variety of things’. He also stated (p.35) ‘attention should be given first place among major functions in the psychological structure’ and that ‘with the indicative function of words, the child begins to master his attention, creating new structural centers in the perceived situation’.

Moreover, the aspect of attention in Vygotsky's theory is also an important concept related to mindfulness. This process is vital when educators consider how young children are learning to be mindful or experiencing mindfulness practices. For example, a teachers' embodied mindfulness or way of being would then, according to Vygotsky's theory, influence what a child learns about mindfulness in the classroom. Vygotsky's important work on attention has been followed on by other researchers (Bodrova, Leong and Akhutina, 2011; Chawla-Duggan et al, 2019) who expand of Vygotsky's ideas and discuss them linked to the areas to higher mental functions including self-regulation and executive function (EF) which are both discussed further in section 2.44.

2.43 Dispositions of Being Attentive, Being Focussed

EF is a set of skills that includes paying attention, organising, planning, understanding different views and regulating emotions (Diamond and Lee, 2011). Researchers (Huizinga, Dolan and van der Molen, 2006) have revealed that EF begins in young children and persists in development into maturity. Moreover, researchers know that the development of EF is most significant before 6 years of age and is critical in developing children's well-being (Victorian Curriculum and Assessment Authority, 2016). When researchers look at EF and mindfulness, it is vital to note that high levels of 'executive function does not constitute mindfulness' and that 'the quality of attention, or one's perspective, is critical (Goodman and Kaiser-Greenland, 2009 p.420).

Burke (2010) discussed how there are several aspects linked to attention when discussing mindfulness. They are focussed, persistent and wide-ranging attention and also the ability to change focus and refocus. Of interest in this study is that Lau and Hue (2011) referred to a study by Research International in 2007, that showed that the attention levels of Hong Kong adolescents are much lower than those of other Asian ethnic counterparts and therefore mindfulness, which has been found to increase children's attention span – may be useful for schools to incorporate.

Again, I note that attention is a different disposition than self-regulation (which is discussed in section 2.44). Although self-regulation also includes many aspects of attention it is a much broader skill. Being attentive is an EF skill and encompasses inhibitory control as does self-regulation which is discussed below. However, they are distinct in that 'Attention refers to the ability to self-monitor one's way of deploying attention, including maintaining attention, ignoring distracting or irrelevant stimuli, staying alert to task goals, and coordinating one's attention during a task' (Ruff and Rothbart, 1996). On the other hand, self- regulation is a much broader skill of encompassing one's skill in understanding and controlling one's behaviour and one's responses to the myriad of emotions and events in the moments of one's daily life (Kochanska, Coy, and Murray, 2001). Chawla-Duggan et al. (2019) discuss how within the research on preschool-aged children their disposition of being attentive within Vygotsky's ideas (1978) is that this disposition is one that is acquired socially. They go on to argue that attention is in fact an 'act of agency against other people' since it only comes to light in social circumstances (Chawla-Duggan et al. 2019, p.14).

2.44 Self-Regulation

Self-regulation is the pursuit of internal and external goals achieved through a capability of managing one's feelings, thinking and actions (Zelazo and Lyons, 2012). Indeed, it is a crucial construct in early learning and significantly affects a child's capacity to thrive in the school environment (Wyman et al., 2010).

Baer et al. (2006), look at self-regulation and mindfulness and suggest there is sound research supporting it. In fact, Burke (2010), observed that intentional attention, that is the intentionality of changing focus, directing attention or practising prolonged attention can be self-regulation. Carver and Scheier (2004) demonstrated that two aspects, self-regulation and executive attention, are intricately linked, and that they inform how executive attention describes the overall scope of how people self-regulate their behaviours. Self-regulation also appears in the latest developmental neuroscience research. This area of research reveals how children's developmental accomplishments and improvements in well-being may link to

enhanced EF (Shonkoff, Boyce and McEwen, 2009). Researchers stated that mindfulness encourages more advanced stages of EF and self-regulation in children (Zelazo and Lyons, 2012). In fact, Garg et al. (2013) noted improved self-regulation elementary school children after a yoga-based intervention. Researchers also found evidence that self-regulation skills may forecast altruistic, or kind behaviour from children's levels of EF and self-regulation (Aguilar-Pardo, Martínez-Arias and Colmenares, 2013), making it a vital goal for preschools.

To sum up, the Ontario Ministry of Education stated that:

> 'Children's ability to self-regulate – to set limits for themselves and manage their own emotions, attention, and behaviour – allows them to develop the emotional well-being and the habits of mind, such as persistence and curiosity, that are essential for early learning and that set the stage for lifelong learning' (2016, p.53).

One must note again that there is an overlap between self-regulation and attention and that indeed self-regulation also overlaps with emotional control or competence, as stated in the quote above. There are many overlapping definitions and components in the research, yet I believe that dispositions I have chosen each require their own examination and reflection as discussed above.

2.45 Prosocial Dispositions

Teachers describe prosocial behaviour in early childhood with terms like empathy, sharing, compassion, helping others, compromise and respect for others (Hyson and Taylor, 2011). Prosocial behaviour is voluntary behaviour that supports another (Eisenberg et al.,1996). Indeed, the majority of children have a genetic underpinning of a disposition towards being caring and kind (Hoffman, 2008). As a result, they develop an understanding of others' emotions and then can create prosocial interventions that support others (Brownell, Svetlova and Nichols, 2009). These prosocial behaviours are strongly related to well-being (Weare, 2018).

Why is it vital to instil prosocial behaviour in young children? Some researchers found that when a young child has prosocial dispositions, it correlates with future skills such as higher levels of academic attainment and social outcomes (Hyson and Taylor, 2011) and readiness for school (Bierman et al., 2008). Researchers such as Spinrad et al., (2006) inferred that students who begin school showing more of a prosocial disposition maintain this advantage in primary school. In alignment, Miles and Stipek (2006) found that low-income, first-graders who are more helpful towards others continued to have better literacy proficiency, even in the third grade. Creating classrooms of caring communities of learners is vital to help develop this disposition in early childhood (Copple and Bredekamp, 2009). In alignment, mindfulness encourages core skills of open-heartedness, curiosity and kindness (Weare, 2013) skills which could develop empathy and compassion in children.

2.46 Social and Emotional Dispositions

Social competence – as per Rubin and Ruth-Krasnor (1992, p.285) – is 'the ability to achieve personal goals in the social interaction while simultaneously maintaining positive relationships with others over time and across situations'. Social competence, for example, includes the following: comprehending social situations; knowing how to regulate emotions and understanding social interactions (Katz and McClellan, 1997). These outcomes can be directly linked to some of the outcome's researchers have noted from MBIs such as being kind, caring for others and being attentive.

Preschool teachers struggle with increasing numbers of children with emotional and behavioural issues (Raver and Knitzer, 2002) for whom developing skills in emotional competence is vital. Emotional competence can be defined as an underlying skill set that consists of the expression, identification and regulation of a person's own and of others' emotions (Mayer, Salovey and Caruso, 2008). As with mindfulness, emotional competence functions to lower stress and builds well-being (Lopes et al., 2005).

2.5 Well-being in Education

The concept of well-being encompasses many facets of Bronfenbrenner's ecological systems theory, such as, including the child, family, school, wider society and the world (Travis and Ryan, 2004; Albrecht, 2016). However, when researchers think of well-being in a school setting, they are more concerned with the psychological, mental and emotional areas (Watson et al., 2012; Albrecht, 2016).

Improvement in well-being was first thought to occur through objective measures such as the state of housing, food options, work alternatives and disposable income (Easterbrook, 2003). However, it was noticeable that although objective measures were improving, mental health was not changing at the same rates and in order to rectify this, subjective measures were developed to rate children's psychological, social and emotional well-being (Statham and Chase, 2010).

Seligman et al. (2009), propose that schools that embody well-being can help cure depression, improve life satisfaction, as well as the quality of learning and creative thinking skills among the student population. However, Buchanan and Hudson (2000) establish that there needs to be a better framework of well-being and what it means for children and that only then can measures develop that support effective practice for both parents and educators. Moreover, there are many critics of research into well-being in schools that have stated that programmes are added without proper research to prove their effectiveness, and schools have turned into therapy centres in some cases, distracting from academic learning (Ecclestone and Hayes, 2009). In fact, Furedi (2017) states that there are an abundance of reports indicating children have growing poor mental health without direct evidence of how that growth was determined. In addition, Furedi (2017) points out that anxiety is simply a part of the human experience. Furedi (2017) also indicates that although it has been reported for many years, around the 1970s children have started to be deemed as emotionally fragile due to anxiety and thought not to have the resilience to cope with this anxiety. In agreement, Ecclestone (2007) has also said that there is no strong evidence that discussing emotions formally in schools brings about

long-term emotional literacy or well-being and in fact, may do the opposite. Another researcher, Craig (2007) condemns the UK based, SEAL programme, that was advocated by the UK's Education Department, as one example of a programme that is supposed to bring in well-being through social-emotional learning but in fact, has no supporting research to show it works. Moreover, Craig (2007, p.4) states that 'we believe that the DfES Guidance is encouraging a major psychological experiment on England's children which we think could unwittingly backfire and undermine some young people's well-being in the longer term'. Furedi (2014) also points out that the way this topic is talked about in schools and education departments is so mixed up that the Code of Conduct and Practice for teachers which is supposed to help teachers know how to help pupils learn does not actually examine the role of an educator correctly but emphasises the role of a teacher as that of a therapist or manager. These arguments against bringing this type of learning to school are strong and merit further investigation. More research is needed to determine whether, in fact, social-emotional learning has a place in schools and what that looks like.

However, even young children display increased states of stress, depression and anxiety along with lower levels of attention (Swick et al., 2013) making it vital to remedy the situation and find solutions to improve children's mental health and school must be considered one option. Moreover, researchers noted that less than 60% of young children start school with the essential well-being skills needed to ensure that they fully develop their learning potential (Bernard, Stephanou and Urbach, 2007). Therefore, a solid footing in developing well-being enables children to display a greater capacity to know and say how they feel, regulate their emotions, and manage their reactions (Victorian Curriculum and Assessment Authority, 2016). Researchers know that the optimal development of well-being happens when overtly taught and formed by experiences (Ashdown and Bernard, 2012), for example, through research proven programmes in SEL, positive psychology (Huebner and Hills, 2011) or mindfulness (Weare, 2013).

2.51 Positive Psychology

When researchers became interested in why some people thrive while others only get by, the field of positive psychology developed (Linley et al., 2006). Positive psychology focusses on what works well and how to keep growing and improving. This idea is in opposition to traditional psychology, which works on a negative bias, meaning it works on bringing people out of negativity and to above a mid-line of emotional satisfaction (Seligman and Csikszentmihalyi, 2000). Put differently, positive psychology counters the traditional psychology background where professionals are treating issues and problems, trying to move people to the point of neutrality, rather than positive psychology, which brings people to the point of flourishing.

Positive psychology research demonstrates that well-being is connected to one's positive disposition, happiness and fulfilment in life (Seligman and Csikszentmihalyi 2000). This understanding aligns with a movement in the positive psychology research to assimilate the eudemonic elements (conducive to happiness) of well-being such as fulfilment, positive relationships and self-awareness alongside the more conventional hedonic interpretations of well-being such as momentary pleasure (Ryan and Deci, 2001).

Schools can help students to flourish using positive psychology interventions (Clonan et al., 2004). Positive psychology encompasses SEL by including strategies and thoughts that shape people's social-emotional competence (Seligman et al., 2009) and thus, schools are an excellent place for positive psychology interventions to occur. Mindfulness also integrates well with much of the research in positive psychology as one can employ strategies to develop more positive outlooks on life, once they accept things as they are (Huppert and Johnson, 2010).

2.52 Social-Emotional Education

Within the concept of well-being there are numerous concepts and terms, which often overlap and are confusing. SEL is one educational approach for improving

well-being, which covers vast acronyms such as social-emotional well-being (SEW) and social-emotional education (SEE) (McLaughlin, 2008).

SEL is 'the process through which we learn to recognize and manage emotions, care about others, make good decisions, behave ethically and responsibly, develop positive relationships, and avoid negative behaviors' (Zins et al., 2004, p.4). Various aspects of SEL include emotional, social and interpersonal competencies and cognitive regulation (Jones and Bouffard, 2012) that overlap with mindfulness. However, major differences of note, between SEL and mindfulness training, are that SEL teaches 'from the outside in' while mindfulness teaches 'from the inside out' (Semple, Droutman and Reid, 2017, p.29). These both appear to be important concepts for young children to learn. Researchers exploring both these concepts and how they might best help children to improve their mental health and well-being will find the most helpful solutions.

2.53 What Is the Connection Between Mindfulness and Well-being?

Those in the West attempting to define or explain mindfulness in a secular context such as Greenberg and Harris (2012) stated that mindfulness is an approach to enhance the well-being in humankind. Several researchers have noted that well-being frameworks can augment our understanding of various qualities of mindfulness practice and research (Albrecht and Veall, 2014; Ager, Albrecht and Cohen, 2015). Many researchers (Burke, 2010; Harnett and Dawe, 2012), have found clear links between student well-being and mindfulness. On the other hand, others, (Napoli, Krech and Holley, 2005; Ramasubramanian, 2017), believe that both well-being and mindfulness concepts are similar, in that they include a range of dimensions such as social, emotional, physical, spiritual, and cognitive and that well-being frameworks often cover these same dimensions, indicating that mindfulness may underpin well-being. Weare (2013) stated that mindfulness holds great promise in the area of well-being and the reduction of mental health issues.

Despite the methodological limitations of mindfulness studies, researchers have noted that, due to the reported benefits, the integration of mindfulness into schools

could be an effective approach to assist students with their well-being (Wisner, Jones and Gwin, 2010; Zoogman et al., 2015; Maynard et al., 2017). Parents, teachers and government officials are all interested in children's social-emotional development and improving their well-being, but to date, there is no consensus on what programmes or teacher training might produce the results needed in preschools (Greenberg et al., 2003).

A clearer understanding of how specific characteristics of mindfulness may contribute to student well-being and the development of positive dispositions will help further comprehension of this topic (Schoeberlein and Seth, 2009; Willard, 2010). In fact, new scientific evidence supports the instruction of these well-being skills in children using various strategies including mindfulness-based practices (Diamond and Lee, 2011).

2.6 Mindfulness Overview

There is little agreement on whether there are useful mindfulness constructs available or not. Mindfulness is a well-defined construct in the field of psychology according to Brown and Ryan (2003). Others struggled to create a conceptual framework around mindfulness stating that there are too many varying and misaligned perspectives (Harnett and Dawe, 2012).

Mindfulness has two principal parts to it according to Brown, Ryan and Creswell (2007) awareness and attention. On the other hand, Baer (2003) noted that exposure, self-regulation, relaxation and cognition are the predominant ideas that frame mindfulness. Hölzel et al. (2011), stated that mindfulness might include a framework that includes the perspective of self, emotional regulation, attentional regulation and body awareness. These types of ideas create a curiosity into mindfulness practices, processes and interventions and how they affect and change the well-being of those who develop these practices. When one looks at mindfulness in children, Goodman and Kaiser-Greenland (2009, p.418) stated, 'This process, in and of itself, trains attention, promotes emotional balance, and cultivates

compassion. It is well suited to children because the approach can be playful, experimental and is always experiential.'

2.61 Mindfulness Practice in Clinical Settings

There are many studies in clinical settings showing various benefits. Two meta-analyses (Grossman et al., 2004; Brown, Ryan and Creswell, 2007) determined that mindfulness delivers some benefits in pain management, anxiety and depression. Other benefits in the research include reduced stress, better immune function and developing more emotional regulation and attention (Baer, 2003; Khoury et al., 2013).

Although the evidence appears quite clear in clinical trials that mindfulness can be beneficial in improving well-being, and happiness and reducing anxiety (Baer et al., 2006), on more-in-depth examination, review articles such as that by Van Dam et al. (2017), are less encouraging, pointing out many haphazard strategies used within clinical research, such as small sample sizes and researcher bias. They stated that scientific data on mindfulness is deficient, and the design of many research studies in the field is flawed. They also stated that control groups are often lacking, and so the public may not know what the real benefits of mindfulness are, and the placebo effect is a possible alternative explanation for the reported benefits (Van Dam et al., 2017). In alignment, Goyal et al. (2014), reviewed over 40 trials with 3,515 participants and found low or no effects associated with helping participants achieve better sleep greater attention, lower substance abuse or weight loss but did conclude the studies reviewed demonstrated moderate improvements in anxiety, depression and pain management through mindfulness meditation.

The number of studies with children in clinical settings is also increasing; however, they are more limited than those of adults, and tend to be of varying quality (O'Toole et al., 2017). Clinical studies with older children have shown positive impacts on depression (Liehr and Diaz, 2010). While clinical studies involving preschoolers are very sparse, a few smaller studies have been conducted. For example, Johnson et al. (2011) discussed in Zelazo and Lyons (2012), that they found a small group of

children improved their ability to sustain attention and improved perspective-taking after a five-week mindfulness course compared with a control group. Lim and Qu (2017), discovered that a single mindfulness training session with preschoolers did not influence the results of attentional control but that other changes in the brain occurred, which are beyond the scope of this study. These studies show the lack of representation and comparability in the research.

In conclusion, there is low-quality research in circulation, but there are also high-quality studies showing benefits, and it appears that the media has misreported or exaggerated some of the results of mindfulness studies to date. Researchers and educators must use a critical eye when reviewing studies to determine their value.

2.7 Mindfulness in School Contexts

In many different settings around the globe, the movement towards being mindful is now an aspiration of many educators, and their students (MAPPG, 2015). Mindfulness in schools usually uses a universal approach, where all students take part, rather than including only children with special circumstances or issues (Weare, 2018). Mindfulness practices are often employed to help alleviate childhood stress (Waters et al., 2015).

2.71 Benefits of Mindfulness in Schools

As with clinical interventions, MBIs in schools now display a variety of benefits that students can experience across a range of ages. In fact, several large-scale reviews of mindfulness in schools have taken place (Burke 2010; Rempel 2012; Weare 2013; Black, 2016; O'Toole et al., 2017; Carsley, Khoury and Heath, 2018) all of which indicated that it is essential for further studies to take place to validate and confirm the positive benefits found in MBIs to date. All these studies showed positive benefits and were optimistic about the promise that mindfulness in schools holds. However, the discourse in mindfulness and its associated benefits is complex with a myriad of aims, foci and practices that includes both mindfulness practices

and a range of contemplative practices that embed within the school day (Ergas and Hadar, 2019).

There are five main areas of reported benefits to children in mindfulness studies. These include better attention and focus (Adair and Bhaskaran, 2010; Black and Fernando 2014), links to well-being including feeling less stressed, more relaxed, calmer and less anxious (Wall, 2005; Lau and Hue, 2011; Kuyken et al., 2013; Black and Fernando, 2014; Van de Weijer-Bergsma et al., 2012, Bernay et al., 2016), increased self-regulation and EF (Black and Fernando, 2014; Razza-Bergen, Cico and Raymond, 2015; Thierry et al., 2018; Wood et al., 2018) better cognitive outcomes (Flook et al., 2015) and more prosocial behaviour (Flook et al., 2015). These are all beneficial for young children to learn and embed in their minds and bodies, which could benefit them for life, if learnt at this early stage in their schooling.

In a meta-analysis, Carsley, Khoury and Heath, (2018) found that MBIs were helpful but those delivered to the 15 to 18-year-old age group had the most substantial effect on well-being and mental health. The outcomes in MBIs were varied considering the many facets involved, including who delivered the MBIs: an outside trainer or the class teacher. Despite this finding, many studies have noted possible benefits for younger children (Weare, 2013) and I believe researchers have a duty to determine if mindfulness could help preschoolers to develop and embed dispositions to help them flourish.

On the other hand, as with the clinical studies, some critics indicated a lack of robustness in the school research. For example, Greenberg and Harris (2012) reported that some studies are too context specific, lack control groups and have other methodological drawbacks which prevent researchers from generalising their research to wider audiences. I believe that qualitative research studies provide a rich and needed perspective in a field such as mindfulness, and that solely quantitative studies, especially RCT, are challenging to execute in schools with so many interacting factors at play and that by increasing both qualitative and quantitative research we may draw richer conclusions in the field.

Significant gaps in the school-based literature exist in the area of ECE, and the benefits of mindfulness for young children under 6 years of age, which is possibly because, as Weare (2013) notes, mindfulness is a somewhat abstract idea and could be difficult for young children to grasp. A few more recent studies (Flook et al., 2015; Wood et al., 2018) have shown promise and indicated that more research in the early years is required. There is also a lack of literature looking at how developing childhood well-being dispositions might benefit from the incorporation of a mindfulness curriculum in preschools.

2.72 A Review of Literature About Mindfulness Curricula in Schools

The mindfulness programmes and curriculum below differ in terms of length of time, the number of sessions students have access to per week, content, practices and whether a class teacher or outside educator delivers the content, making it quite challenging to compare and contrast. Semple, Droutman and Reid (2017) found that many mindfulness curricula have insignificant or no research to substantiate their effectiveness. They also noted the lack of consistency. A review noted that the only thing the mindfulness curricula seemed to have in common was the lack of robust research. Appendix 1 showcases an overview of MBI in schools by date, mostly concentrating on those in the lower primary and preschool age range, but also those whose curricula have multiple research studies.

Many studies, discussed below, have noted increased attention as a benefit. The Hawn Foundation has created a programme called ‘MindUP’ which has had several research studies linked with it. Schonert-Reichl and Hymel (2007) studied the curriculum that offered a teacher self-reported framework. The study observed that children aged 9 to 13 had increased attention, focus and behaviour after the study. Schonert-Reichl et al. (2015) conducted an RCT that had similar positive benefits.

Move-into-Learning (MIL), is an eight-week programme of a 45-minute session once per week with breathing, yoga, meditation, art, writing and music therapy. An outside trainer delivers the session, and the class teachers then reinforce those

skills. Teachers observed less hyperactive behaviour and higher levels of attentiveness when two classes of third graders experienced the programme (Klatt et al., 2013).

Napoli, Krech and Holley (2005) examined the attention displayed by 228 students in an RCT study. Students were in the first to third grades. The 24-week MBI programme called The Attention Academy Program (AAP) helped children experience an intervention 12 times during 45-minute sessions, every other week. The programme was targeted at children with higher levels of anxiety than their peers. The results revealed that the children had significant improvements in attentional measures, lower test anxiety and improved social skills compared when in the intervention group. Effects were small to medium.

A controlled study – called Mindful Awareness Practice (MAPS) – took place with 7 to 9-year-old students for eight weeks. Those in the MAPS programme group displayed more improvements in EF than students from the control group programme (Flook et al., 2010).

The Mental Health Foundation of New Zealand produced a well-being course targeted at the Maori population. It consisted of eight-lessons about mindfulness. Bernay et al. (2016) studied 124 primary school students pre and post-intervention and found significant improvements in relationships, subjective well-being and cheerfulness. Measurements were performed with The Stirling Children's Wellbeing Scale (SCWBS).

EF is another area where many benefits are of note. The eight-week-long Inner Kids programme was studied by Flook et al. (2010) which showed improvements in children's EF through parent and teacher-rated measures.

Several studies have developed research related to the Mindfulness in Schools Programme (MiSP) in the UK from 2010 to the present. Huppert and Johnson (2010) conducted a study based on an eight-week MBCT programme that was adapted for teenagers, which later became the '.b programme'. The '.b programme' is now a school-based programme for youth. The intervention was one lesson a

week for four weeks. Students who experienced the intervention showed significant positive effects on ego-resilience, mindfulness and mental well-being. Following this, Kuyken et al. (2013), conducted an extensive study with 522, 12 to16-year-old students in nine schools showing that teenagers in the intervention group reported lower stress, fewer symptoms linked with depression, and higher levels of well-being. Now the .b programme is part of the Myriad project, a large-scale study with over 6000 students in 76 schools, including individuals aged 11 to 16. This research study will run a cluster-RCT examining both the cost and outcome effectiveness in schools. However, the outcomes of this research will not be known for several years. This study is to determine what the real benefits are, and for whom and whether mindfulness programmes are cost-effective in schools. MiSP has another curriculum, the 'paws B programme', which is for elementary school children. A study by Vickery and Dorjee (2016), of 71 students ages 7 to 9 years at three primary schools in the UK found that school teachers can easily incorporate the curriculum into their regular school day, the majority of children like the programme and it could increase their metacognition skills.

Liehr and Diaz (2010) conducted a trial study with a small group of summer camp students from minority backgrounds, using the Mindful Schools Curriculum which demonstrated a decrease in depressive symptoms. Black and Fernando (2014) conducted a five-week mindfulness-based curriculum intervention looking at children's classroom behaviour using the Mindful Schools curriculum. Teachers reported pre- and post-intervention. Students in the intervention had better self-control, more prosocial behaviour, superior calming abilities, the capacity to improve their attention skills, and self-control when compared to children in the control group. Various measures were used to come to these conclusions.

2.73 Mindfulness in Schools Research: Hong Kong

There are limited studies on mindfulness in English literature from Hong Kong. One study by Lau and Hue (2011) examined adolescents with poor grades. Forty-eight teenagers from two different schools took part in the intervention which lasted six

weeks. The findings indicated a significant increase in well-being and a decrease in symptoms linked to depression among both intervention groups when compared with a control group.

Lam et al. (2015), designed and implemented a programme for 14 to16-year-old students in three Hong Kong secondary schools. The pilot programme engaged 51 students struggling academically with an aim to reduce dropout rates. However, a student report of the programme found a lack of interest in learning mindfulness by the students and noted that they felt the quiet activities to be boring. This observation led to a redesign by the programme directors, who injected more activity into the syllabus.

Finally, Lam (2016) ran a study with 93 fourth to sixth-grade students. A screening process identified 20 students who had high levels of internalising problems who then took part in a nine-week MBI. Issues such as panic attacks, obsessive-compulsive disorder (OCD) and anxiety decreased significantly. Most students also reported that the programme was helpful.

These limited studies show a gap in the literature. These were the only mindfulness-in-schools' studies set in a Hong Kong context, and none linked to preschool education.

2.74 Mindfulness Research in Preschool Settings

A review of the literature with 3 to 6-year-old children, the same age as in this study, resulted in minimal findings, with only twelve studies linked to mindfulness found with relation to preschoolers in the past twenty years; most of those in the same period as this research. Additionally, Willis and Dinehart (2014) complied a literature review involving studies linked to contemplative practices to assist children with school readiness and found that children showed improved social-emotional management and self-regulation. While a literature review by Erwin and Robinson (2015), noted only ten studies and included a broader age range of 0 to 8 years. Many of the studies, to date, have focussed on improving EF, and almost all of the studies used yoga, exclusively or extensively, as the mindfulness tool examined

with children. Besides, over half of these studies lack specific details into what the curriculum entailed, how often the children practised, or how many children were involved.

Kim and Lim (2007) addressed a mindfulness programme in a South Korean preschool. Their article is quite vague in terms of numbers and outcomes, but it discusses how mindfulness might help children be happy by developing their mind, body and spirit through movement, meditation and relaxation exercises. Subsequently, Adair and Bhaskaran (2010) investigated diverse student populations in India, using mindfulness as a tool with 2 to 5-year-old children. The study did not indicate the number of students involved nor did it specify the length of the intervention, but it noted that the teachers involved the children in yoga, mindful eating and Rangoli art. They found that children had improved concentration, focus, attention spans and were calmer. They also noted fewer instances of poor behaviour in the group.

Mische Lawson, Cox and Labrie Blackwell (2012), studied 33 3–5-year-old children with a yoga programme called YogaRI, within a six-week intervention of 10 minutes daily, four times a week, and found that there were minimal effects on the study's focus of academic performance and fine motor skills.

Razza, Bergen-Cico and Raymond (2015) examined preschoolers ages 3 to 5 years in a yoga program and found that the children experienced improved self-regulation but had no improvement in focussed attention. They also noted improved delayed gratification in the daily programme, which lasted over 25 weeks and was conducted by increasing the duration of classes as the weeks progressed, starting with 10 and ending with 30-minute sessions.

Bubela and Gaylord (2014) conducted a study with 27, 3 to 5-year-olds, in a preschool setting using Hatha yoga, sitting meditation and breathwork. The six-week programme occurred once weekly for 20 minutes. The authors found that the balance, flexibility and strength of the students increased.

The first significant study in an ECE setting was achieved when Flook et al. (2015), found positive outcomes for preschool children with a 12-week 'Kindness Curriculum' that promoted mindfulness and kindness in preschool classrooms. This study showed that children's emotional regulation and prosocial behaviour increased; they demonstrated less selfish behaviours and more social aptitude after the intervention. Lessons were held twice weekly for twenty minutes. Furthermore, this study showed improved delay of gratification and cognitive flexibility. The kindness curriculum integrates well-known adult mindfulness practices, redeveloped for preschool children's abilities. The curriculum relies on the teacher's observations to assess its effectiveness; however, the study itself examined several measures. Researchers stated that the initial findings were convincing, but more studies are required to fully understand whether similar studies could replicate the results and also whether the benefits last beyond the length of the curriculum (Flook et al., 2015). This study builds on this research by including parents' and children's viewpoints, using various methods, such as the Mosaic approach and exploring from a qualitative perspective.

Poehlmann-Tynan et al. (2016) conducted a pilot study with economically disadvantaged preschoolers from five preschools. Twenty-nine children took part in a 12-week RCT examining their empathy and self-regulation. Children were assessed three times, pre-intervention, post-intervention and three months post-intervention. Preschoolers in the intervention group significantly increased their attentional focus and self-regulation pre- and post-intervention. Self-regulation was further improved three months later, however, no changes in empathy or compassion were observed.

Recently, Wood et al. (2018), studied a 12-session programme called 'Mini-Mind', designed for preschoolers using an RCT, with a small sample of 27 young children ages 3 to 5-years-old. Teachers rated students on their EF and found nonsignificant, small to medium effects, more favourable towards the intervention group.

Zelazo et al. (2018) studied 218 preschool children from low-income families at two preschools and offered randomly assigned groups one of three different sessions, held thirty times over six weeks. Groups either joined mindfulness and reflection training, a literacy class, or continued with no intervention classes. Results did not produce any difference with the mindfulness and literacy group, but both groups were higher in EF than the group with no intervention, indicating that small group interventions of some kind may be beneficial for low-income children. Thierry et al. (2018) found that a yearlong mindfulness curriculum intervention with 4–year-olds, in four schools, experienced improvement in EF over the control group.

With research developing and exploring different socio-economic aspects of the children in programmes, it is important to also explore what effects this may have on the outcomes of the different programmes. As Thierry et al. (2018) noted, the students in Flook et al.'s (2015) study were mostly white, upper-middle-class children, while some of the later studies involve less affluent, Hispanic children. More research is needed to see how mindfulness programs may impact children from diverse family backgrounds, and in this study, another cultural layer was explored through the Hong Kong location.

2.75 Developmentally Appropriate Practice and Mindfulness

When one thinks about mindfulness and young children, integrating mindfulness tools that are child-centred and promote best practice in ECE may be the best way forward. Schonert-Reichl and Lawlor (2010) noted that if children are feeling uninterested, their attention may drift, and so they may not experience any benefits from mindfulness practices. The (National Association for the Education of Young Children (NAEYC), 2018) stressed that early childhood is a developmental time of its own, with its unique features and not a 'preparation for primary school'. They emphasised that a preschool must be developmentally appropriate, and not too advanced or too easy for the children, who have skills that are rapidly developing, in a variety of spheres, between birth and 6 years old.

Researchers also need to consider the fact that DAP is a controversial concept. Bredekamp and Copple (1997) produced a document with lists of activities identified as either appropriate or inappropriate for children, according to their ages. The criteria were similar to the list of do's and don'ts issued in Hong Kong, as noted earlier. I find it is quite a prescriptive approach and others, such as Dahlberg and Moss (2005; Erwin 2017), question it as assuming all children develop in the same way. Some researchers (Viruru, 2001) are of the opinion that the DAP is applied cross-culturally because it is a Western-European view of child development, which some tout as the best, and Woodhead (2005) notes the DAP framework is not as comprehensively appropriate as it appears to be. In fact, Erwin (2017, p. 66) has suggested that the importance of being present may not be reflected well enough in certain settings. She also says that DAP may not mirror children's true selves, and that we may need to look at well-being with a more global mindset.

If one wonders how to make mindfulness practices appropriate for young children, one might refer to Brown, Ryan and Creswell (2007) who have shown that mindfulness can develop in individuals with practice and persistence. Mindfulness can be integrated into one's thoughts and emotions as well as to a variety of senses, including visual, tactile, auditory and gustatory, (Napoli, Krech and Holley, 2005). Besides, the cultivation of mindfulness often occurs alongside meditative practices, such as walking, eating, listening, colouring-in, gardening or brushing one's teeth in a mindful way (Albrecht, Albrecht and Cohen, 2012). The use of these types of sensory work fits in with early childhood development, where good practice is known to include sensory play (Ayres and Robbins, 2005; Gascoyne, 2016). In fact, NHS Dumfries and Galloway (2016) explain how sensory experiences are so essential for young children. They explain that first one receives information through our senses about an experience and then that information is sent to our brain for processing, which helps us to make sense of the experience. Next, our brain signals our body about how to respond and finally, our brain stores these data and uses it to guide responses to future experiences, all of which is crucial to our well-being. Hannaford (1995) states that the more children experience sensory opportunities, the more creativity and learning takes place. While Gascoyne (2016) indicates that

sensory activities contribute to children's emotional well-being. In fact, research with older children who followed the MBCT-C programme showed that sensory practices produced an array of positive outcomes in children aged eight to 15 (Semple and Lee, 2014). Semple, Reid, and Miller (2005) noted that mindfulness-based practices are self-management practices and children seem to find these practices engaging as they are in control of their learning.

Young children have specific learning needs that are quite different from older children, and this study explores what types of practices would be suitable for young children to develop mindfulness. For example, Chilvers and Cole (2006) noted that children who could participate in sensory programmes were able to improve their general well-being and self-esteem. Other researchers such as Dunn (2001), have assessed the links between sensory input and the vital part it plays in emotional development of young children. Also, Hannaford (1995) found that learning, thought and creativity are all improved with greater sensory experiences. In addition, guidance from Goodman and Kaiser-Greenland (2009) on the shorter lengths of silent or calm practice were followed while Lillard (2011) explains that in early childhood settings when one pays attention to sensory and motor practices, a child integrates body and mind creating a sense of well-being. These are all thoughtful ideas to be considered when designing a programme for young children.

2.76 Mindful Moments -Planned and Unplanned Practice

Mindfulness includes both the formal and informal, the planned and the unplanned (Bishop et al., 2004). By offering smaller moments of mindfulness in the classroom, students may experience long-term benefits (Napoli, Krech and Holley, 2005). Many researchers (Erwin et al., 2017; Erwin, Robinson and Aveta, 2017), encouraged ECE educators to incorporate mindfulness into current classroom practice, and not only include specific mindfulness lessons weekly or daily. Others such as Flook et al. (2015), have taken the approach of direct instruction. I believe, a combination of the two aspects is best and that, as Albrecht (2016) stated, there is a difference between teaching mindfulness and teaching mindfully.

Jackson (1968) was the first to use the term ‘hidden curriculum’ which implies that there is both a hidden, that is an unplanned, perhaps unintended agenda, and a visible curriculum in schools. The hidden curriculum involves the explicitly unplanned activities in the classroom, for example, the attitudes of the teachers, which are then absorbed or noted by the students, or the offhand comments a teacher makes that the student integrates into a new meaning. Goodman and Kaiser-Greenland (2009, p.421) indicate that teachers can share mindfulness, without speaking, through ‘quiet nonverbal sharing’, and that this represents a vital means of teaching embodying mindfulness. In agreement are Segal, Williams and Teasdale (2013), who proposed that a teacher’s mindfulness practice may affect their ability to teach mindfulness. Others, such as Flook et al. (2013) have also suggested that mindfulness is beneficial for teachers.

In fact, a teacher’s professional disposition is a newly emerging field in the literature (Dottin, 2009). This field explores how teachers’ professional dispositions can be developed through mindfulness (Roeser et al., 2012). Linked to this finding is research showing that the more a teacher practices mindfulness, the more the children in his or her class are noted as developing the dispositions or skills linked to this area (Weare, 2013). Singh et al. (2013) found in a study of preschool teachers, who attended an eight-week mindfulness course, that teacher-student interactions improved positively, with a decrease in the challenging behaviour of their students. In alignment, Goodman and Kaiser-Greenland (2009) state that adults being mindful is the best way to convey compassionate mindfulness to children.

Many teachers are aware that students learn better when they are in a good mood. Fredrickson (1998) has found that a more positive mood leads to broader attention spans, which, in turn, leads to increased well-being in students. Moreover, a positive mood connects to more well-rounded thinking (Kuhl, 2000), and a negative mood creates narrower attention spans (Bolte, Goschke and Kuhl, 2003). Therefore, the climate in a classroom is highly influential. For example, a study conducted by Oberle and Schonert-Reichl (2016), with grade four to seven students in Canada,

showed that children's level of cortisol rose when a teacher's level of stress and cortisol was raised. In the same vein, mirror neurons could also influence a young child's experiences through their teachers' actions (Rose, Gilbert and Richards, 2016). If the teacher embodies mindfulness, this would be an example of where mirror neurons may influence the child positively. Therefore, not only is the children's mood and outlook essential, but the teacher's as well, with Duckworth, Quinn and Seligman (2009) demonstrating a strong link between student results and a teacher's feelings towards their own life satisfaction. In fact, there appears to be a reciprocity in classrooms between students and teachers' levels of well-being. This connection is noteworthy, as it may point towards either the teacher or the student needing to take measures to increase their well-being to create healthy, happy classrooms. Mindfulness may be helpful, as I will discuss later in this chapter.

2.77 Considerations When Implementing Mindfulness in Schools

Several reviews of mindfulness with children have found that mindfulness-based interventions produce no undesirable effects and are typically easy to implement (Burke, 2010; Weare 2013; Weare, 2018). However, others such as Shapiro and Carlson (2009) imply that mindfulness practices may not be valuable, or even suitable, for individuals suffering traumatic stress and so making sweeping statements about these practices is to be avoided.

The determination of whether a mindfulness programme is a valuable use of time for children compared to other practices is also important. Since school days are hectic, and time is scarce, educators would benefit from making sure that bringing mindfulness into the classroom is more useful than something else, such as science work. However, since teachers can integrate mindfulness into many other areas of learning, there is a strong argument for including mindfulness especially now that researchers have provided evidence of the benefits in school settings.

2.78 Methodological Issues in Mindfulness Research

Mindfulness research in schools is often of mixed quality, inconsistent in its approach and offers no clear or standard programme structures, measurements or expectations. There are many criticisms due to its sometimes-haphazard approaches and lack of robustness. Although some robust research has emerged in schools, particularly in the tween and teen ages groups, there is still insufficient research that explores mindfulness in preschools.

Burke (2010) reveals that the child-based mindfulness literature continues to show many methodological limitations, such as small sample sizes and limited control groups. These constraints lead to a limited scope to draw on as conclusive evidence towards implementing such programmes in schools. However, since there are more abundant numbers of such studies emerging regarding its benefits and most of these studies are showing some value, it is crucial that researchers continue to contribute to this research base.

Many different aspects can alter or influence the results in mindfulness studies, and these are difficult to control. Goodman and Kaiser-Greenland (2009) stated that it is vital that schools include parents in the mindfulness work done by adults. While Huppert and Johnson (2010), urge us to consider variances in ideas such as how regularly students practice mindfulness at home, which could also alter results. Many studies do not introduce these variables which could alter results substantially.

Domitrovich and Greenberg (2000) found that another limitation of MBI research is that most studies do not explain how the programmes they are studying are implemented, leaving readers unsure of the procedures for replicating the studies. Semple, Droutman and Reid (2017) note that due to the lack of research into any specific mindfulness curricula, the research conducted is lacklustre and often involves the programme creators, thus introducing the risk of bias, and that there are none comparing mindfulness programmes or longitudinal studies. Weare (2018) agrees there needs to be more separation between creators and research to reduce this risk of bias, but still showed many benefits in different programmes and stated

only rigorous research was in her review. Bias may be reduced by introducing more reflexivity into research as suggested by Cohen and Crabtree (2006). Reflexivity is the practice of becoming more self-aware (Popoveniuc, 2014). Begoray and Banister (2012, p.4) state that ‘reflexivity, then, is a researcher's ongoing critique and critical reflection of his or her own biases and assumptions and how these have influenced all stages of the research process‘.

Studies have indicated that to achieve long-term benefits a regular mindfulness practice is needed (Segal et al., 2002) and since most MBIs in schools are five to twelve weeks, research is needed to study how longer programmes affect results and how long the benefits found last after the intervention is complete.

This study delivers a highly detailed account of the intervention and methods used so that many of the questions and doubts expressed in other studies do not arise, such as what kind of mindfulness practices took place, what teacher training was available, and other pertinent questions.

2.8 Summary and Conclusions

Mindfulness is a broad topic that has become well-researched (Kabat-Zinn, 1990; Baer, 2003; Weare, 2013; Zoogman et al., 2015; Maynard et al., 2017). After success with adults and then with youths in clinical settings, schools became interested in mindfulness to cope with the intensifying rates of mental health issues in children (Weare, 2013). Schools started to develop and use universal MBI programmes to help all children improve their well-being (Flook et al., 2010; Zoogman et al., 2015; Albrecht, 2018).

The research discussed in this chapter has produced some clear conclusions with most studies noting MBIs are beneficial and that no harm or adverse reactions are thought to arise from their implementation (Burke, 2010; Weare, 2018). Some of the more common benefits MBIs in schools claim are improved well-being (Lau and Hue, 2011); better focus and attention (Napoli, Krech and Holley, 2005); improved

self- regulation (Poehlmann-Tynan et al., 2016); higher levels of prosocial behaviour (Flook et al., 2015); and better social and emotional competence (Weare, 2018). The literature agrees that in today's high-stress era of escalating poor mental health among students these benefits are vital to moving towards better social-emotional outcomes.

On the other hand, as the field is maturing, more review articles are being produced. These reviews offer a much more critical view with caution heeded about overstating the known benefits. Criticisms of much of the research include lack of robustness in areas such as consistency, explaining the specific mindfulness practices used, researcher bias, the definitions of mindfulness, the details of what occurred during the intervention itself and other factors. (Van Dam et al., 2017; Weare, 2018). Aligned fields such as well-being, SEL and positive psychology face the same criticisms and critiques as mindfulness, with researchers now indicating that many schools are implementing programmes with no solid research to corroborate their effectiveness (Craig, 2007; Ecclestone and Hayes, 2009; Watson et al., 2012).

A number of questions remain after the literature review. Of note, researchers and educators still do not know how effective mindfulness programmes are with young children, or even if young children can practice mindfulness. Although several studies have emerged in the early years, that offer cautious optimism, there are very few comprehensive studies in this area.

Other questions remain unanswered. Further exploration is needed to examine how mindfulness may underpin well-being in young children, Much of the early years research focusses solely on yoga as a mindfulness approach but by examining what other mindfulness components work best, if any, and what practice to include, as well as what are the best ways to determine their effectiveness the field may find the best options to bring mindfulness to preschool settings.

Some of the areas of consideration concerning ECE specifically are the development of childhood well-being dispositions. While research has shown these are crucial to develop in early childhood contexts to achieve optimum outcomes

there is still not much specific research on the strategies to do so, this study will examine how mindfulness may help develop this area, specifically examining the development of positive dispositions such as kindness, attentiveness and compassion. There is also a gap in the literature connecting childhood dispositions with mindfulness practices, and this study intends to provide a discussion about how these connect, and how educators might think about developing these dispositions in young children through mindfulness curricula.

Another overarching conclusion from the literature review was the need for more multi-informant data collection in mindfulness studies, for example, from teachers, parents, children or peers. This study will address this gap by triangulating findings from three parties, parents, teachers and children as explained in Chapter 3.

Hong Kong, with its reported low levels of student well-being, and the mix of Eastern and Western cultures, has a gap in the literature regarding how to address the well-being of its students with very few mindfulness studies found in schools, and no studies in the early childhood context.

A final question arising from the literature review is how students' voice can be incorporated into studies. While minimal studies with older children have included the self-report of students, with younger children a challenge is presented in listening to their perception. I intend to address this gap by introducing preschoolers voices through their drawings in mindfulness research as described in Chapter 3.

Chapter 3: Methodology

3.1 Introduction

Researching how mindfulness facilitates the development of young children's dispositions and well-being is challenging for several reasons. These reasons include that the lack of clear boundaries of the mindfulness concept and definitions and that many of the validated measures used in mindfulness and well-being studies are self-reported, which would not be suitable for young children. Additionally, working in a preschool environment has constraints including time, staff training, capacity, and a lack of clinical-like conditions often used in mindfulness research. There is no standard research procedure for examining the effects or influences of mindfulness in schools, although an RCT model seems to be becoming more common. One of the main reasons for conducting the study is because of the prevalence of on mindfulness studies in clinical settings, which are then replicated in school environments as though they are laboratories, which I feel is inappropriate. Much of the previous mindfulness research is unspecific and does not include the information required to replicate the study accurately. As part of being reflexive, other factors I reflected on are that since this research took place in Hong Kong, there were some cultural challenges to be considered, such as participant's language and social expectations.

This research is a two-phase mixed methods study with a curriculum intervention. In this study, quantitative and qualitative data and the Mosaic approach are used to construct knowledge about whether mindfulness may facilitate the development of positive dispositions and well-being in preschool children.

Each of the following research questions had its methodological challenges.

1- How does mindfulness facilitate the development of children's well-being dispositions in a Hong Kong international preschool context?

2- What are the perceptions of teachers and parents in a Hong Kong international preschool context relating to mindfulness and its influences on children's well-being dispositions?

3- How do preschool students in a Hong Kong international preschool context perceive the ideas of mindfulness and kindness?

These questions come with challenges about how researchers measure the change in dispositions and well-being in preschoolers who may not be able to articulate their experiences in words or to self-report in a way that older students can. This issue then leads to thinking about which adults would be most appropriate to understand and report on a child's well-being. Additionally, there are challenges in how researchers can understand what young children are experiencing during a learning activity.

This chapter will describe the key decisions made in the study as well as the philosophical standpoints chosen and the rationale of why I selected these. I will first explore the research approach I have adopted and the justification for this approach before explaining how the study was designed and issues of: access sampling, data collection methods, data analysis, reliability and validity and the ethics surrounding this study.

3.2 Epistemological Foundations

It is important for a researcher to state to establish what lens the researcher is using in their research. Johnson, Onwuegbuzie and Turner (2007) stated it is essential to choose methods that answer the research questions most successfully. I have followed Johnson, Onwuegbuzie and Turner's (2007) advice and have chosen a variety of methods that I feel serve the intention of this thesis best and help to answer my research questions most effectively.

I selected a pragmatic mixed methods paradigm as I include quantitative methods, although the focus is on the qualitative data, and within this view, I believe in a

constructivist stand. I believe there are many different viewpoints and ideas to be discovered and constructivism would allow me to delve deeper into those insights and different viewpoints while still being pragmatic in the sense of collecting multiple types of data through a mixed methods study.

3.3 Research Approach

Mixed methods is a pragmatic and rigorous research approach used in many different fields (Creswell, 2015). Tashakkori and Creswell (2007) reported that researchers utilise mixed methods when they integrate the findings after collecting and analysing both the closed-ended, (quantitative), and open-ended, (qualitative) information, and then make more conclusive deductions. In alignment, Johnson, Onwuegbuzie and Turner indicated:

> 'Mixed methods research is the type of research in which the researcher or team of researchers combines elements of the qualitative and quantitative research approaches (e.g. use of qualitative or quantitative viewpoints, data collection, analysis, inference techniques) for the broad purpose of breadth and depth of understanding and corroboration' (2007, p.123).

When defining mixed methods data, an understanding of what it is not, is equally important as a researcher. Mixed methods is not merely the collection of both types of data, but it is the combined and deepened analysis that results from the use of both that results in discoveries that help to delve into the research questions (Creswell, 2015). Mixed methods research focuses more on one aspect, quantitative or qualitative (Teddlie and Tashakkori, 2009). In this study, qualitative research is the focus with, for example, personal stories from parents and teachers, children's drawings and children's voice being the lead form of evidence supported by quantitative survey data to develop questions and support the personal stories pre- and post-intervention. In this project, the analysis and triangulation of data are

paramount to the study. Denzin (2006) indicates that triangulation refers to the use of multiple data sources and methods which creates a thorough insight into the phenomena and to make conclusions. In this case, data from three different persons; parents, teachers and children, and both qualitative and quantitative data sources give a deeper understanding with more breadth and depth.

3.31 Advantages and Disadvantages of Qualitative and Quantitative Research

To explain why the best approach to this research was mixed methods, I will first examine the pros and cons of quantitative and qualitative research and explain how combining these two approaches led to more robust outcomes in this study.

3.32 Qualitative Data Pros and Cons

Strauss and Corbin (1990), stated qualitative research is varied and diverse and leads to findings by examining lived experiences, behaviours, emotions, interactions and other ideas that do not link to quantification. While qualitative data has limited generalisability and includes fewer people, it offers detailed perspectives and captures the voices and story behind the data (Creswell, 2015). Additionally, Richardson (2012) found that knowledge is created in qualitative research by the meanings found in different situations and indicate that qualitative approaches offer a more extensive variety of research methods, epistemological points of view, and ways to comprehend people's unique experiences. This was essential to this study as I explored the perceptions of children, parents and teachers. Some of the disadvantages of the qualitative approach include the lack of generalisability due to smaller sample sizes (Harry and Lipsky, 2014) and also being particularly time-consuming to analyse large qualitative studies (Flick, 2011).

3.33 Quantitative Data Pros and Cons

Bryman (2012, p.35) stated that quantitative research is 'a research strategy that emphasises quantification in the collection and analysis of data…'. It is researcher

driven but can draw broader conclusions and aids in the efficient analysis of data (Creswell, 2015). The larger sample this approach allows creates more generalisability to populations or subpopulations (Carr, 1994). However, the quantitative analysis does not explain how social reality forms, or the explanations linked to the actions of the participants (Blaikie, 2007).

3.34 Justification of a Mixed Methods Study

I chose mixed methods for several reasons. I believe that being able to research a larger sample with more general questions in a quantitative survey and then to be able to ask questions, delve deeper and explore more emotional or personal stories and ideas is essential in a school setting, where researchers are exploring real people in real settings.

Some such as Bryman (2012) believe that real-world settings like schools do not work well with traditional empirical paradigms and I agree with this. Classrooms have many different factors and individuals participating, so it is challenging to create a clinical or laboratory-like setting with the corresponding results one could produce in such an environment. I believe this to be true and think that using combined methods resulted in a richer database upon which to base my conclusions.

I believe that by combining the different data I can triangulate them and construct useful meanings. I think offering varied types of data will be helpful and will be able to explain the story of my research in a more understandable and useful way. Additionally, an often-overlooked aspect, children's viewpoints (Ager, Albrecht and Cohen, 2015), would not be able to be explored without this broad framework for data gathering.

A solely qualitative approach would not have allowed for the greater number of responses from parents and teachers across the range of schools. It would not be possible to establish an overview of perceptions and current feedback to further examine the parents' current views of their children's dispositions and well-being,

their expectations of mindfulness and the skills, aptitudes and attitudes their preschoolers show before and after the intervention. However, I believe that each child is unique and understanding the personal stories and circumstances of each child leads us to greater understanding.

3.4 Sampling

The participants in this study were parents and teachers of preschoolers of a group of seven local 'international style' preschools located in Kowloon and the New Territories who agreed to take part. These styles of preschools are representative of many similar types of schools throughout Hong Kong.

In considering the sampling process, I explored both systematic and purposeful sampling (Creswell, 2015). The sample frame is all the parents and teachers of a group of seven local 'International' preschools. I studied the characteristics of the sample population, and I judged all parents and teachers to be similar enough to accept the questionnaires from any of the parents and teachers who consented to partake in the study.

The population for this study was 587 preschool parents and 67 teachers in seven preschools within Hong Kong. From the population, 343 parents of 3-6-year-olds representing 379 children (this explains parents of siblings) and 63 teachers agreed to participate in the study. Most students were native Hong Kong Chinese children; however, there were approximately 2% of other nationalities present in each of the schools. English was the medium of instruction, which is a second or bilingual language for most of the students, although they had another language lesson such as Putonghua for twenty minutes per day. Each classroom had two teachers apart from some of the 3-year-old classes, which had three teachers. Nearly all the parents were fluent in English as a second language and all current school communications were sent home in English. All teachers spoke fluent English and were a mix of nationalities.

Table 1 in section 3.75 shows how the sample is arranged into different groups.

3.5 What Data Was Collected and Why?

This research study collected many forms of data to answer the research questions.

3.51 Survey Data

Quantitative data included pre-and post-surveys which were used to understand the bigger picture across the seven schools and the general perspectives of the parents and teachers. Additionally, these surveys helped in forming the interview questions. The surveys also captured the changes parents and teachers perceived in their children or students, pre- and post-intervention.

3.52 Justification for the use of Surveys

Surveys allow for large amounts of data collection and is an effective way to examine views of a larger audience (Sarantakos, 2005). I intended to use the data to gather the views of the parents and teachers in a timely and effective manner, before using that data to study the reasoning behind the numbers and to explore the children's perceptions. I also wanted to compare pre- and post-data from an individual level for the child, and a class level from the teachers.

3.53 Semi-Structured Interviews and Focus Groups

I gathered qualitative data from focus groups using semi-structured interviews, with up to eight participants per group, which were used to discuss the nuances, stories, backgrounds and concerns of the participants. I explored personal stories, ideas and themes as related to the research questions. Also, teachers' classroom observations and children's drawings and voices, scribed by the class teacher, were examined to construct the research.

3.54 Justification of Semi-Structured Interviews and Focus Groups

Focus groups are a vital tool for social scientists and are used often in many types of research studies across multiple disciplines (Suter, 2000). I believe that focus groups allow for deep insights into how people think and why they believe certain ideas, which can result in far greater data than from a survey alone. Interviews can produce a great deal of in-depth data. However, one-on-one interviews can be time-consuming and expensive. A focus group can offer depth with a small group of individuals, allowing for a more efficient way to gather the views of different groups. Other benefits can arise from the interaction of participants in these groups. As Kitzinger (1994) described, participants may be more content or at ease in a group setting rather than alone with the interviewer. Discussions among the focus group participants had the potential of encouraging connections to concepts that otherwise might not have happened in an individual interview (Nagel and Williams, 2013). In fact, (Nyumba et al., 2017, p.1) state, 'Focus group discussion is frequently used as a qualitative approach to gain an in-depth understanding of social issues. The method aims to obtain data from a purposely selected group of individuals rather than from a statistically representative sample of a broader population'. Although there are some drawbacks to using focus groups such as the possibility of a strong participant steering the conversation, or the researcher missing some of the body language cues, in general, focus groups have been used widely to delve into the thoughts, ideas and reasons behind some of the concepts in a study (Nagel and Williams 2013). During and after the focus groups interview data were coded according using ideas from Saldana (2016) on thematic coding for visual images.

3.55 Classroom Documents Including Children's Drawings

The Mosaic approach by Clark (2005) helps researchers to acquire a deeper appreciation and knowledge of the perspectives of children in different aspects of their lives and schooling, allowing them to have a voice. My viewpoint echoes that of the Mosaic approach in that preschoolers are particularly good at exploring and examining their environments with curiosity and interest and are highly competent meaning-makers.

Children use many languages to express themselves. In his work on the One Hundred Languages of Children (Reggio Children, n.d.) Malaguzzi from Reggio Emilia indicated that children have hundreds of verbal and non-verbal languages. Drawing is one of those languages that a child might use to explain what is happening in their lives, both externally and internally (Kress, 1997; Lindqvist, 2001).

Insights into the social-emotional states of preschoolers can be obtained by observing and analysing their drawings (Matthews, 1999; Farokhi and Hishemi, 2011). In agreement, Brooks (2009) demonstrated that a drawing will frequently 'make visible' a concept or idea from a child's perspective. Brooks indicated that drawing allows a child to work with thoughts, ideas or concepts outside of themselves and enabled the child to make connections with other ideas. Furthermore, MacDonald (2009, p.2) stated that 'eliciting students' drawings or work samples is one established way of representing internal understanding externally'.

3.56 Justification of Classroom Documents and Children's Drawings and a Justification of Coding the Drawings

Ager, Albrecht and Cohen (2015) stated that children's voice is often lacking in mindfulness research. When one thinks about children's voice, researchers want to capture 'their thoughts, feelings and reflections' (Ager, Albrecht and Cohen, 2015, p.900), and that much of the mindfulness research does not investigate 'how children think and feel'. It was essential to include children's voices to analyse what children experienced in this intervention and the themes that emerged from their experiences.

Hayes, O'Toole and Halpenny (2017) point out that to value the child as a competent, powerful person, the art of respectfully listening to young children is vital. Binfet (2016) used drawings to explore how children in lower primary school perceived kindness. He found that children showed themes of sustaining

friendships, helping others, and being respectful after asking them about their pictures.

Qualitative conventional content analysis is recommended by (Hsieh and Shannon, 2005) to discover primary and secondary themes within drawings. I investigated the children's interpretations of both mindfulness and kindness through their drawings and used suggestions from Saldana (2016) on how to determine relevant themes. In order for qualitative research to reach the measures of trustworthiness, researchers have to show that their data analysis was consistent, and precise and that a systematic process was used to do so with enough detail to show credibility (Nowell et al., 2017).

.

3.6 Data Collection

I chose an advanced intervention design (Creswell, 2015) which includes an explanatory sequential design. In the explanatory sequential design, quantitative research is the starting point followed by qualitative research which helps explain the results from the quantitative data. Figure 2 shows how the quantitative and qualitative work overlapped in this study, although it portrays a linear process, this was not always the case as described in this chapter, however, this visual model is an effective way to show the overlap of data.

3.7 Procedure

Creswell (2015) indicates that two features, timing and integration are key concerns in a mixed method study. Figure 2 shows the progress and considerations linked to timing and how the data integrate at various points in the research plan.

Figure 2: Visual Model for Mixed Methods Research Design

Type	Procedure	Products
Time Period Pre- Intervention		
Quantitative Data Collection	• Developing the survey from research • Pilot Survey/Survey (teachers and parents) • Survey hand-delivered to sample population • Survey Collection	Pilot Survey of a sample Survey of a sample Measures from a sample Numeric data
Quantitative Data Analysis	• Data screening • Cleaning the data • Data analysis	Descriptive statistics Frequencies
Connecting the Pre-Intervention Quantitative Data Analysis to the Qualitative	• Developing the interview questions from the survey data based on the more notable results and other questions linked to the research	Semi-structured interviews in focus groups
Qualitative Data Collection	• In-depth face-to-face semi-structured interviews in focus groups	Interview transcripts
Intervention Period		
Qualitative and Quantitative Classroom Data Gathering	• Gathering of classroom documents • Assessments done in class as per the curriculum	Classroom Documents and assessments Children's Drawings and words scribed by the teacher

Post Intervention Period		
Quantitative Data Collection	Post-Survey hand-delivered to sample population Post-Survey Collection	Survey of a sample Measures from a sample Numeric data
Quantitative Data Analysis	Data screening Cleaning the data Data analysis	Descriptive statistics Frequencies ANOVA
Connecting the Post Intervention Quantitative Data Analysis to the Qualitative	Developing the interview questions from the survey data based on the more notable results and other questions linked to the research	Semi-structured interviews in focus groups
Qualitative Data Collection	In-depth face-to-face semi-structured interviews in focus groups	Interview transcripts
Qualitative Data Analysis	Coding and thematic analysis Cross-thematic analysis	Coded themes Cross-thematic analysis Mosaic Analysis
Integrating the Qualitative and Quantitative Pre, Post and During Data and providing Analysis and Synthesis	Synthesis and interpretation of qualitative and quantitative results Comparison of quantitative results with qualitative themes	Future research Implications for mindfulness practices in preschools in Hong Kong and beyond and the influence it has children's well-being dispositions
Adapted from Teddlie and Tashakkori (2009)		

In discussions with the principals of the seven potential preschool sites for the study, we considered whether the schools in question would be interested in allowing this research at their facilities. A meeting with the School Board of Directors confirmed that the school would be happy to host the research project if I followed certain protocols with regards to not identifying the schools in the research documents and that the research would be optional for all teachers and parents, which of course is standard ethical protocol.

A letter of permission and letter of invitation to participate in the research project was sent to the parents and teachers from the sample. The invitation also asked the parents' permission to access the classwork and observations of their children during this period. The invitation included a request to participate in both the survey and/or the interviews and was extended to parents and teachers (Appendix 2 and Appendix 3). I collected and collated these forms per their affirmative or negative responses

3.71 Teacher and Parent Survey Design

When designing the parent and teacher surveys I planned to measure parents' and teachers' perceptions of mindfulness and to measure certain aspects of well-being and whether a change occurred pre- and post-intervention. To accomplish this, I decided to investigate four areas that the research had shown were vital, that had improved well-being in other studies, and that were known to be important dispositions in early childhood. The areas I chose were focus/attention which is linked with the disposition of being attentive and self-regulation, prosocial behaviour which is linked with dispositions of being altruistic and being kind, concern for others which is linked with the dispositions of being empathetic and caring, which in Chapter 2 I addressed were consistently linked to young children's well-being. Although as discussed in that chapter, one could argue there is some overlap in the research in these dispositions, however I felt justified to examine each as I believe they are all vital to children's well-being.

Since the parent survey focussed on the individual child, I adapted several measures validated in studies in the past that were quite in-depth for each area. I designed the parent questionnaire using or adopting these measures and using a 4- or 5-point Likert scale or Likert-type scale as was used in the original measures. I also asked some general questions using a 5-point Likert scale. I chose Likert scales as they are a supported scale for measuring behaviour, attitudes and perceptions (Fink, 2008).

The development of the parent survey used measures from previous research. I adapted Chi, Jastrzab, and Melchior's (2006), measure of Concern for Others for this research. This survey was selected as it was used previously in numerous research studies and is validated. This measure is vital as concern for others, is strongly linked to empathy and is one of the areas of well-being dispositions that preschoolers might develop if provided with the tools to do so. I adapted and modified a self-regulation measure from Novak, Scott and Clayton (2001) found in Tawana and Moore's (2010) overview on self-regulation measures. These measures, modified and adapted, were used in many research studies and are validated as a reliable tool for measuring parents' opinions and ideas. Prosocial behaviour was measured using a modified tool developed by McConnell et al. (1984), found in Dahlberg, Toal, Swahn and Behrens (2005) which I adapted and finally, social competence is measured using a modified and adapted version of the Parent-Social Competence scale from Conduct Problems Prevention Research Group (1995), the teacher version of this scale was used in the Flook et al. (2015) study. Modifications and adaptations to all scales included changes in language, using only some questions and adding in my own questions and other changes to fit the context. Other general questions on the survey used a five-point Likert scale asking participants to rate their perceptions and experiences with mindfulness and well-being. The pre and post questionnaires are found in Appendix 4 and 6 (Parents' Surveys). Please note the first two questions on Appendix 6 were not asked to Waitlist Group parents.

The teachers' survey was developed using similar aspects to the parent survey. However, I felt it was too much of a burden to ask teachers to score each child in their class and I was also interested in learning about the overall feelings and perceptions the teachers had of their class as a whole. As a result, I asked a variety of more general questions using a similar five-point scale as with the parents' survey but then used an 11-point scale for the pre and post comparison items about mindfulness characteristics, kindness, focus and emotional management. I decided to use an 11-point Likert scale to include possible variance in whole class perception by the teacher since the higher number of categories may be more meaningful to the teachers and used a scale of percentages from 0-100% with 10% intervals. Scales with more than five-points can reduce issues such as leniency bias, which refers to the attitude of the raters, and their bias towards not putting a low mark on a scale, and the 'halo effect' which is more personal and means the rater may mark what they perceive as a good or desired response (Pease, 1988). Since the teachers had to generalise a large group of children in one question, a larger scale was thought to be more revealing. See Appendix 5 and 7 (Teachers' Surveys).

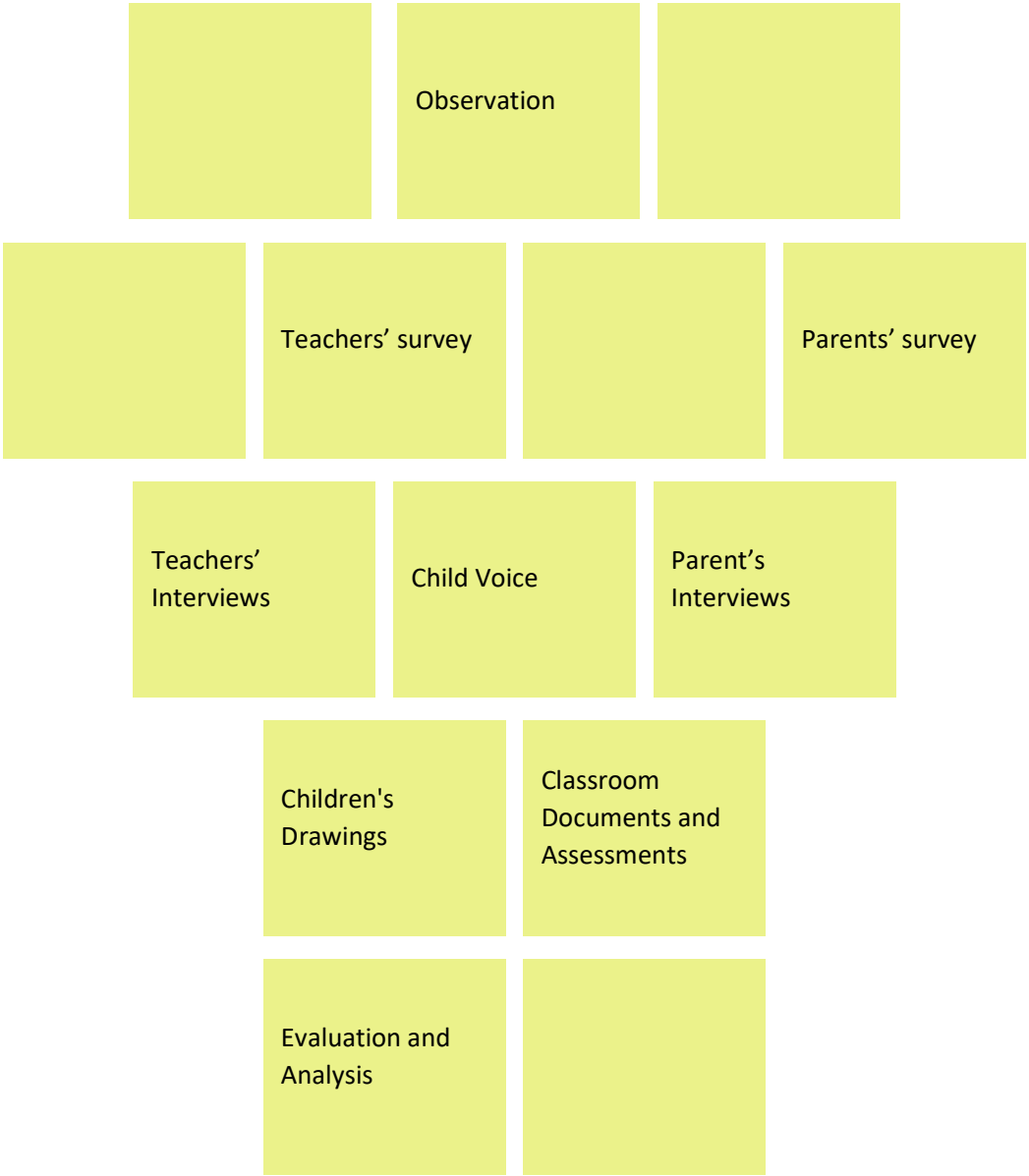
The pre-survey was followed by semi-structured group interviews as was the post-survey. Classroom documents, which were part of the regular curriculum are described below and were collected. Analysis, including children's perspectives, was compiled as a Mosaic approach (Clark, 2017), revealing experiences with mindfulness and kindness during the intervention. I then synthesised and triangulated the research from three perspectives with all the data listed above. Figure 3 shows the Mosaic approach to this study.

3.72 Pilot Phase Data Collection Methods

A pilot study took place that evaluated the usefulness and effectiveness of the survey instruments to ensure questions were clear and could be answered (Fink, 2008). Twenty parents not related to this sample but from another school within the group of schools associated with this study filled in the parent survey, and ten teachers also from a linked but different school within the group completed the

teacher survey as a pilot test. Ten parents and five teachers were also asked to fill in the pilot survey again one week later to test test-retest reliability. The parent survey found three questions with double negative wording challenging for participants to understand, therefore; I updated those questions. There were no issues with the teachers' survey.

Figure 3: Mosaic Approach of the Current Research Study



Adapted from Clark (2017)

The pilot study ensured there were no issues in the language, understanding of questions, and to ensure the survey elicited the information as intended. The survey was then distributed to all parents and teachers with envelopes to keep responses confidential.

3.73 Mindfulness Teacher Training

All teachers took part in a two-day face-to-face training programme before the intervention as part of their regular professional development programme. Teachers were also encouraged to develop their mindfulness practice alongside the curriculum intervention. Teachers had gap tasks such as readings, video and apps to help develop their mindfulness strategies. Teachers were encouraged to take the online Palouse MBSR programme or a local MBSR or other mindfulness programmes to develop their own practice. Palouse Mindfulness (n.d.) is a free online version Kabat-Zinn's eight-week MBSR course that anyone can work through at their own pace. Goodman and Kaiser-Greenland (2009, p.424) indicated that 'children learn to build their own mindfulness skills more effectively when the adult embodies mindfulness. Having and maintaining an established mindfulness practice is a prerequisite for this work'.

Each lesson had a detailed lesson plan with suggested resources. These were all explained and discussed during the teacher training sessions. I designed the curriculum, along with input from other mindfulness practitioners and incorporated activities related to the breath, focus, kindness and empathy adapted for preschoolers.

Research from Wolf (2000) and Goodman and Kaiser-Greenland (2009) was considered when designing the curriculum along with best practices in early learning. During the intervention itself, weekly meetings were held to discuss the

upcoming week's lessons and ensure the teacher had a clear understanding of how to implement the lessons and all the resources required. The mindfulness lessons used a curriculum that promotes well-being with activities that support the development of empathy, kindness and focus and attention. Resources were sourced and provided. Teachers planned together each week and shared ideas and reflections of their experiences with each other.

3.74 Intervention Groups

Cappella, Massetti, and Yampolsky (2009) note that creating model scientific conditions in a school environment for research purposes is extremely challenging. They state this difficulty is due to many factors including classroom division and challenges such as not being able to create a randomised allocation of students to interventions. I agree with this and when working with schools, I did not wish to implement artificial circumstances, but to explore and learn from the process and examine whether the implementation of a mindfulness curriculum is worthwhile from the perspectives of parents, teachers and the young students themselves without forced, contrived actions such as dividing the class. However, I did note that many previous studies recommended RCT in MBIs (Greenberg and Harris, 2012; Flook et al., 2015) and thought if it were possible without causing interruption or unethical circumstances, it would be beneficial to be able to compare two groups to determine any differences pre and post-intervention.

The schools in this study often share resources among the school group in order to meet budget concerns, and within the larger schools it is routine for one class to take part in a curriculum aspect, while another class takes part later. For example, with physical education equipment, one group has curling while the other group has basketball, and then they swap after four to eight weeks. Another example is with the reading programmes schools share sets of guided readers and so run different curriculum at different times.

School management preferred for all schools to participate in the initial mindfulness intervention. This decision was due to parents comparing school information and the competitive nature of schooling in Hong Kong, as discussed on Chapter 2. Therefore, only the three schools which required additional resources, due to the higher number of classes in those schools were selected to run the intervention in two groups, one in the first six weeks and one in the following six weeks. In all seven preschools, what I have labelled the Intervention Group, implemented the mindfulness curriculum during the research period. In the three schools with large numbers of classes, another group of classes, labelled the Waitlist Group, ran business as usual (BAU) during this phase and were waitlisted for the intervention. After the initial research intervention, the Waitlist Group ran the 6-week curriculum; however, these results were not measured during this research. This procedure was implemented for several reasons, 1) to minimise the expenses of the resources for the curriculum which included books, art materials and toys and 2) to allow for comparison between groups, albeit with a much smaller second group.

The schools had classes based on the age of the students. There were four levels per school 2-year-olds, 3-year-olds, 4-year-olds and 5-year-olds. No two-year-old classes participated in this study as this class has children joining continuously throughout the year and it would be difficult to manage the intervention. Four of the seven schools only have one of each age level class (3-year-olds, 4-year-olds, 5-year-olds). The other three schools have different class arrangements. Table 1 indicates the number of classes at each level in each school, and which classes were in the Intervention Group and Waitlist Group. To ensure ethical equality to students, all the Waitlist Group classes received the same six-week curriculum delivery following the first intervention while the Intervention Group students implemented BAU lessons, meaning that all children received the same curriculum but at different times.

Control groups have benefits and considerations and are quite a controversial topic, especially in educational research. As discussed before, much of the research in mindfulness is critical of those studies that do not use control groups (Van Dam et

al., 2017) and so I decided to include a Waitlist Group that was feasible without disturbing the regular school routines. The purpose of a control group is to 'estimate the differences in outcomes between a group of students that was exposed to a program and an equivalent group that was not exposed' (Schanzenbach, 2012 p.227). Schanzenback says some of the potential downsides or issues with control groups are the ethical considerations of one group waiting, or not ever having the opportunity to experience a positive program, for example. However, this is assuming that the programme will be beneficial. Other limitations of control groups are that the Hawthorne effect (which is that the experience of being in the control group changes one's behaviour once one knows they are under scrutiny) may occur (Schanzenbach, 2012). Researchers must consider the ethics of placing children in different groups and ensure that first, no harm must come from the research and secondly, efforts must be made to ensure the well-being of all involved and even ensure the maximum benefits for all involved, known as beneficence (Mertens, 2012). This is discussed further in section 3.10.

3.75 Pre-and Post-Surveys

The survey, in this instance, determined general information on their parents' and teachers' knowledge, practice and perceptions of mindfulness using Likert-type scales. I decided to use a survey for several reasons, including the ease for parents and teachers to fill out the required paperwork without overburdening them.

I produced a survey questionnaire which was photocopied and distributed to the teachers and parents who agreed to participate. Parents who had more than one child received the number of copies corresponding to the number of children enrolled in the school so they could indicate their perceptions for each of their children pre- and post-intervention. There was a return of a total of 369 surveys from both the Intervention Group and the Waitlist Group, in other words all participants during the pre-intervention and 352 surveys in the post-intervention. This difference was due to nine surveys not being returned and one child who moved into the bilingual programme the school group also runs. A total of 63

teacher surveys were returned from teachers in both the Intervention Group and the Waitlist Group, that is all teacher participants, pre-intervention and 62 post-intervention due to one teacher being on long term sick leave.

Table 1: Intervention and Wait List Groups						
	Number of classes in each school, per age group, displayed according to Intervention Group or Waitlist Group					
School Identifier	Intervention Group 3-year-old class	Waitlist Group 3-year-old class	Intervention Group 4-year-old class	Waitlist Group 4-year-old class	Intervention Group 5-year-old class	Waitlist Group 5-year-old class
#A	1	0	1	0	1	0
#B	1	0	1	0	1	0
#C	1	0	1	0	1	0
#D	1	0	1	0	1	0
#E	2	1	1	1	0	0
#F	2	1	2	1	1	1
#G	1	1	1	1	1	1

From the table above you can note that schools A, B, C, and D had one class in each age group, so all participated in the Intervention Group. In contrast, schools E, F, G had multiple classes in some age groups so had both Intervention and Waitlist groups.

Participating parents received the survey questions in the form of a printed paper sent home with the student in the student's folder where notices and other critical information were regularly sent home and returned to school. To ensure privacy, parents also received envelopes. Teachers reviewed these folders daily. Returned surveys were sent to the office and given to me for analysis. The teachers received

the form and an envelope and returned their surveys in a staff meeting at each school.

This table shows how the sample was divided to gather data.

Table 2: Participant Numbers

	Parents	***Teachers***	***Children***
Total population	587	67	631
Participants *parents with more than one child are treated as separate and fill in forms for each child*	343 parents representing 379 children (explains siblings)	63	379
Children's Documents *Journal entries with scribed teacher notes on child's voice*	n/a	n/a	Predicted 1516 journal entries expected Actual 1497 journal entries Analysed 312
In-class Measures	n/a	n/a	*Sharing assessment* - 356 returns *Kindness assessment* 23 datasets
Surveys (completed by both Intervention and Waitlist Groups)	Pre intervention survey -369 Post intervention survey -352	Pre interventions survey -63 Post-intervention survey -62	-----
Focus Group (Intervention groups)	Pre-intervention 55	Pre-Intervention 61	----

	Post-intervention 54	Post-Intervention 47	

3.76 Pre- and Post -Semi-Structured Interviews

Some concerns came about when planning for the interview data collection. Although most parents could write fluent English, some may have been more comfortable explaining ideas at a deeper level in Cantonese. To solve this issue, a Cantonese translator was available to translate any words or explain concepts in deeper breadth during the interviews. The translator was a member of one of the School's Boards. She was completing a research degree herself and practised yoga and mindfulness personally.

The semi-structured interviews comprised the ten criteria of proper interview techniques from Kvale (2007, p.91), are 'to be knowledgeable, structuring, clear, gentle, sensitive, open, steering, critical, remembering and interpreting'. I took the time to review for sensitive areas in the interviews and to make certain that teachers and parents did not feel obliged to answer any uncomfortable questions. Cultural considerations were also taken into consideration. These considerations included seating arrangement, formal introductions and a thank you ceremony for research subjects, who then received a thank you card.

Qualitative data collection methods included written responses to the research questions, individual interviews, or focus group interviews. I selected focus group interviews since this would enable a broader range of ideas to be collected in one setting. This method may also be a more convenient method for parents to provide question responses, compared to writing lengthy notes. Also, the teachers participating in each school were in small enough groups to manage the focus groups in one or two sessions per school. I was familiar with, and often ran focus groups in my professional work and so felt comfortable to do these interviews without a pilot trial.

This interview time was when I asked questions, heard stories and felt the emotions of the participants. I planned the interview questions based on the initial data gathered from the pre-surveys and from other crucial information that was vital in order to learn about things that could not be determined in the quantitative survey, all while keeping in mind my research questions.

I conducted pre-interviews in-person and post-interviews were done over Skype. This method was due to the cost, as it was too expensive to remain in Hong Kong for the duration of the study. I was based in Hong Kong for four weeks of the study and afterwards documents were couriered to me in Canada.

3.77 Parent Semi-Structured Interviews in Focus Groups

In the consent letter, I asked subjects for their willingness to participate in semi-structured interviews in focus groups. In order to delve deeper and explain the information that I gathered from the survey data. From those that replied, a sample of up to eight parents per school whose child was in the Intervention Group were randomly selected. Interviews took place in the schools before pick-up time to make it more convenient for the parents. A total of 55 parents were interviewed pre-intervention. Fifty-four parents were interviewed post-intervention due to one parent not being able to make it, on the dates of the interviews, which resulted in seven interview groups and fourteen sets in total of interview data, pre and post intervention These parents were all from the Intervention Group. The data from those parents who only attended one interview was still included due to the complex dialogue interactions within the quantitative data, (see Appendix 8 and 9 for pre-interview initial questions and Appendix 10 and 11 for post-interview initial questions).

The interview protocol for each set of interviews included digital recordings and transcriptions of the interviews. This protocol included greeting the participants and thanking them for their time and insights. I started each focus group with a short review of the purpose of the study. The development of the interview questions was

with the constructivist research idea of laddering or pyramiding to go further in-depth and learn more while keeping the questions open and fluid. I used both laddering up and laddering down, common methods in constructivist research to gather relevant information. I began by asking questions from the prepared list, phrased in open-ended, fluid formats such as:

Tell me more….

- Can you give me an example of…?
- So, you are saying….?
- Why is that then? (Denicolo, Long and Bradley-Cole, 2013)

The time allotted for each interview was forty-five minutes and interviews ranged from forty-six to fifty-nine minutes.

3.78 Teacher Semi-Structured Interviews in Focus Groups

One of the difficulties of interviewing the teachers was finding a suitable time for them to meet. Teachers agreed to meet in two groups in some larger schools and one group in the smaller ones. The meetings were agreed at times the staff of that school thought best, which varied from afterschool, a Saturday morning to lunch breaks.

This resulted in nine interview groups in total and a total of eighteen sets of interview data pre- and post-intervention. A total of 61 teachers attended the pre-intervention interviews from both the Intervention and Waitlist Groups and 47 participated in the post-interview interviews from the Intervention Groups. These meetings also followed the same protocols as the parent interviews. However, the focus of questions was slightly different as seen in Chapter 4. Interviews lasted for about sixty-minutes per group, with a range spanning from fifty-four to sixty-two minutes. All the interviews were recorded and transcribed.

3.79 The Intervention

Teachers used the MindBE curriculum for this intervention which was a bespoke programme created for the group of schools. Students had three, fifteen minute sessions per week plus one more extended period per week of thirty-minutes for integrated mindfulness art projects, journal drawing or lessons that required a longer time frame. The curriculum also included mindful moments throughout the day which included ideas such as taking deep breaths at transitions and ringing the mindfulness bell to ground the students, drawing attention to sounds, and mindful walking during transitions. Additionally, since children have a specified snack time at these schools, mindful eating was encouraged, and mindful movement was incorporated into all PE classes for five minutes at the start of the lesson. The curriculum was made to be appropriate for the attention spans and research on how young children learn best by following on the research of others. For example, Goodman and Kaiser-Greenland (2009) stated that young children have short attention spans, so completing short reflective practices frequently, is most beneficial to children and this curriculum offered many short practices for optimisation. Also, Gascoyne's work (2016) who advocates the use of sensory activities to develop young children's well-being was included with many sensory activities including the sense of smell, taste, touch and hearing were included. Also, like Australia 's Early Years Learning Framework, which emphasises a robust, holistic interdependence with a child's mind, body and spirit in regards to their well-being (Australian Government Department of Education, Employment and Workplace Relations, 2009) this curriculum considered the developmental levels appropriate to young children in regards to the activities planned and included an array of engaging activities. As Erwin (2017, p.66) states 'Incorporating the concept of being present disrupts the need for constant motion and activity by embedding stillness, calm and simply being (without doing) as an integral part of a young child's life. Being fully present in each moment is one of the greatest treasures children can experience at an early age'. This curriculum takes into consideration these ideas.

The curriculum was designed to consider the way young children learn and included many sensory and play-based activities as well as bibliotherapy, which is the use of

storybooks to aid emotional literacy. Lessons were developed to encourage the skills of paying attention, focusing on ideas like the breath, sound or movement and loving-kindness but mostly to capture children's natural mindfulness, curiosity and playfulness. The parts of the curriculum that involve introspective practice increased each week to provide a slow and increased period of reflection similar to the Inner Kids curriculum (Goodman and Kaiser-Greenland, 2009).

Activities included lessons such as focusing on their own breath by using practical activities such as breathing in by pretending to smell hot chocolate and breathing out by blowing it cool, finger breathing, using bubbles to breathe in and out, and using the Hoberman sphere as a concrete visual to aid breathing in and out. Listening activities included listening to a bell until children could no longer hear the sound, passing a tambourine without making a noise, listening walks and listening to our bodies. Prosocial activities and ideas linked to concern for others, included creating a kindness tree with messages of kind acts, making a kindness book, circle massages, passing a smile and storybooks. Mindful eating was included at snack time when teachers encouraged the children to eat slowly and notice the taste, smells and feelings and sounds (if applicable) of the food and once a week reflecting on where the food came from and expressing gratitude for this sustenance.

Mindful moments that occurred throughout the day was a very important concept and included ideas such as pausing before the next activity, taking a breath during transitions, using the listening bell to refocus before a new activity or encouraging the teacher to reground themselves by using some of these strategies in order to show mindfulness through their own embodiment of the practices. The full curriculum and additional guidance materials are found in Appendix 12. Two classroom assessments were in the curriculum, as well as suggested four journaling activities for children.

3.710 In-Class Assessments and Observations

Classroom Assessment 1 -Sharing and Kindness

Students in the Intervention Group participated in a sharing assessment was part of the curriculum. Children received ten stickers. They could keep them all or share them with a friend; this measure was adapted from (Flook et al., 2015). A record was kept by the preschool teachers who observed what number of stickers the preschoolers saved for themselves versus how many they shared with others in a prearranged task completed twice during the intervention in the first and last week. Children paired up and then shared the stickers with their partner. Teachers instructed students to find a friend in class to share stickers with, roughly following the Flook et al. example (2015). After pairing up, one child in the pair received a bag with ten stickers inside and was asked to share with their friend in whatever proportion they wanted. Teachers noted the number of stickers the child gave to their friend. This activity was repeated over several periods until all children had given their stickers out as they wished. It was repeated at the end of the intervention.

Classroom Assessment Activity 2 -Kindness

Students in the Intervention Group did this assessment to note whether children could name more acts of kindness than before the curriculum intervention. This measure took place in a circle time setting at the beginning and near the end of the intervention. Teachers brainstormed acts of kindness with the children and scribed all the answers. This measure was done as a class not individually with 12 classes. Teachers discussed throughout the six weeks ways to be kind and built up kindness trees in the classroom and then children brainstormed. Teachers noted the differences in the number of items mentioned on each occasion.

3.711 Children's Journal Drawings/Writings and Voice

I examined children's drawings from the student's journals on four occasions during the curriculum intervention from those in the Intervention Group. These journals were part of the children's regular daily work and allowed the children to draw freely from a prompt or question relating to different parts of the curriculum. The teachers

asked the students about their drawing and scribed what the child said. Teachers then listened carefully and scribed what the child indicated their picture represented. The prompts to draw included ‘What is mindfulness?’, ‘How am I mindful?’, ‘Who is kind?’, and ‘How can I be kind?’. Scribing was an approach already used inside the school for the past two years. Teachers were trained on scribing children’s words and listening to the children’s voice in all areas of the curriculum and built documentation linked to the voice of the children.

3.8 Data Analysis

I will clarify how I analysed the data and the justifications for why I used such methods. Barbour (1999) stated that systematic and calculated collection and analysis is essential in every step of the data collection to ensure the results were more trustworthy and more cohesive than if done separately. The qualitative data collection took place after the preliminary quantitative analysis at each stage of the study and this enabled deeper insights, questioning and stories to emerge. Data were also analysed together to provide more validity to the research study, and to note where more depth could develop in the qualitative interviews. Table 3 shows how the data answers the research questions.

3.81 Quantitative Analysis -Survey Data

For the quantitative survey data, I used a variety of statistical tests.
Sample quantitative analyses included:

1. Mean scores (plus standard deviation) on each subscale at pre-test and post-test
2. Change scores (post-test minus pre-test) on each subscale
3. Frequencies – How many scored 1, 2, 3, 4, etc. on each item/subscale.

After reversed scoring several items on the survey, in the first instance, I calculated frequencies and mean scores. This initial data was analysed pre-intervention and led to the development of questions in the semi-structured interviews. Items that

had interesting ranges, wide ranges or very narrow ranges were of most interest. Surveys can be found in Appendices 4,5,6 and 7. I was also interested in analysing variances in the population, and the factors influencing those variances pre- and post-intervention. Each subscale on the survey was computed as the mean of their items. I then ran Repeated Measures ANOVAs to test pre- and post-intervention changes including any differences with groups and ages, as the information was required.

Table 3: How Did the Data Answer the Research Questions		
Research Questions	**Data**	**Analyses**
The research questions I was investigating were: 1- How does mindfulness facilitate the development of children's well-being dispositions in a Hong Kong international preschool context? 2- What are the perceptions of teachers and parents in a Hong Kong international preschool context relating to mindfulness and its influences on children's well-being dispositions?	Surveys Interviews Classroom Documents	Quantitative analyses – frequencies/descriptive ANOVA scores Qualitative analyses-thematic coding
3. How do preschool students in a Hong Kong international preschool	Children's drawings and teachers' scribing	Qualitative analyses-thematic coding Mosaic approach

context perceive the ideas of mindfulness and kindness?		

Regarding assumptions, normality was assumed under the central limit theorem and Mauchly's test was used to assess variances sphericity; whenever sphericity was not guaranteed the Greenhouse-Geisser correction was implemented. RM ANOVAs can be especially prone to a breach of the assumption of sphericity (Field, 2013). Northern Arizona University (n.d.) stated 'Sphericity refers to the equality of the variances of the differences between levels of the repeated measures factor. Sphericity requires that the variances for each set of difference scores be equal. Put simplistically, we assume that the level of dependence between pairs of groups is roughly equal'. Effect sized was assessed with η^2, considering 0.08 as a strong effect size, 0.05 as medium effect size and 0.02 as low effect size. Significance was established at 5%. These were run on SPSS v.23 (Connolly 2007; Field, 2013; Salkind, 2016).

3.82 Qualitative Analyses - Coding of Interviews and Justification for Using Coding

Coding is a critical part of many qualitative studies (Auerbach and Silverstein, 2003; Flick, 2014) and is an almost universal process in qualitative research (Creswell, 2015; Elliot, 2018). The coding process is like a puzzle, first one pulls it apart to find meaning and then one must recreate it in a meaningful way (Creswell, 2015). Elliott (2018) believes that coding is not a one size fits all process and each researcher will make it their own.

The justification for using coding comes down to time and sensibility, that is it takes a great deal of time and energy to go through hundreds of pages of data all while trying to make sense of it (Creswell, 2015). By coding, one can index, map or

catalogue data which leads to disparate data which then allows the researcher to make sense of them in relation to their research questions (Elliott, 2018).

Braun and Clark (2006) and Saldana's (2016) procedures for coding were used in this research study. Saldana (2016, p.4) stated 'A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language base or visual data'.

As with most constructivist researchers, I coded my interviews both during and after my interviews were conducted. Coding involves a process of coding and recoding to refine categories and possibly subcategories from which researchers decide on themes or concepts to build or develop theories. Although Saldana (2016) mentions that some authors confuse the words coding and themes, he distinguishes them by stating that the theme is an outcome of coding, analytic consideration or categorisation.

I kept a codebook with my list of emerging codes and their descriptions. These codes evolved as the interviews took place. As recommended by Saldana (2016), I manually coded as this is a smaller-scale study and I planned to work with the data in paper format. However, also as recommended by Saldana, I used some Microsoft search functions to find data that was useful.

During the initial coding as the interviews took place, I checked in with another researcher, who served as the translator in the sessions to see if she had any insights to add to my coding. This additional person was useful as she is Chinese so could also advise some of the cultural relevance of what the parents had communicated.

Once the interviews were completed, parents' and teachers' data were coded separately. I revisited all my pre-coding and went more in-depth to identify the concepts then themes that emerged. I analysed cross themes from these data between the two groups in the later analysis. The data that emerged throughout this analysis helped establish a clear picture of the participant's thoughts, feelings

and perceptions related to the research questions.

3.83 Qualitative Analyses of Children's Drawings

Saldana (2016) recommended using a holistic approach when coding visuals such as children's drawings. I coded children's drawings and analysed into recurrent themes as I felt it essential to include student voice in this research. Cook-Sather (2006) endorses the use of 'student voice' in new school initiatives. The words scribed by the teachers and those from the kindness leaves were part of this analysis.

Triangulation and Synthesis of the Mixed Methods Data

Data were analysed and synthesised to see if there was convergence and to better understand any divergence. Denzin (2006) suggests there are different types of triangulation including both method triangulation and data source triangulation both of which are found in this study. I used these forms of triangulation to contrast the findings and acquire a greater grasp into the phenomena and whether or not they agreed or disagreed and how they converged or diverged to give a fuller sense of the overall topic as advocated by Morgan (2013).

Once the overall data were gathered. I first reviewed each piece systematically and separately, and then compared it systematically to the findings from other data. Boyatzis (1998) agreed that in order for qualitative and quantitative research from various sources to be able to converge and make overall sense, thematic analysis can act as a translator between the two areas. The point of this triangulation was to understand the phenomena and gain greater breadth and depth in the topic.

First, I analysed the data within the same category, for example, quantitative data from parents and then teachers. Next, I also examined the qualitative interviews from each of the parents and teachers separately. After I started to examine the data from a cross-method perspective, for example, the parents and teacher quantitative data was then compared and then the parents and teacher qualitative

data. Finally, all these data were synthesised together as a whole to see if the data agreed or contradicted each other and any notable similarities or differences.

Next, the children's work and measures were analysed separately and then compared to see if there was convergence in their work with findings from the parent and teacher data. Finally, all these data points were reviewed together noting where they agreed and disagreed, how strong the individual pieces were, and where they would fall when comparing and contrasting to the previous analysis and what picture emerged from the data as a whole. In fact, I believe that like Braun and Clarke (2006) that thematic analysis is a method for categorizing, analysing, forming and describing themes discovered in data sets. Data were analysed and synthesised to see if there was convergence. That is when looking at the general picture did the array data points make sense and did it offer a similar or divergent view on the research questions. This triangulation offered both breadth and depth into the analysis.

3.9 Reliability and Validity

Many researchers have declared quantitative methods reliable, but not holding validity, and qualitative methods being valid but not highly reliable (Britten and Fisher, 1993). Yet, by using a mixed methods approach and integrating both methods, the study gained strength and has greater reliability and validity. The model of trustworthiness developed by Lincoln and Guba (1985), which is appropriate for an interpretative study such as this one includes credibility, transferability, dependability and confirmability. Each of these areas is discussed in the sections below and how they linked with the overall reliability and validity of the study.

3.91 Reliability

Reliability concerns the ability of a study to be reproduced and produce the same results as the original study or in other words, the consistency of the results over

time and the accurate representation of the population the study was designed to measure (Joppe, 2000). Furthermore, reliability is what shows researchers that a procedure does not have errors in its measurement; the more errors there are the less reliable the measure is (Fraenkel and Wallen, 2003). From a qualitative perspective that the study is repeatable is an important aspect of reliability. As mentioned above the test-retest reliability was high, which Charles (1995) details as consistency or stability within the questionnaire and it is a component of reliability. It is essential to note here that a philosophical perspective is present in this research. My values and beliefs, including honesty, having multiple perspectives and being open-minded, have created this approach and the confidence that this is the best method to gather data.

Cohen and Crabtree (2006) state that researchers often assume that bias in research is unwelcome; however, they also point out that according to Malterud (2001) preconceptions to issues and ideas are only bias if the researcher neglects to discuss them and that they are in fact, different concepts. This is a very valid point in my view because it is unrealistic to think researchers can just remove their preconceptions; however, I agree it is important to raise these issues, examine them and bring them to the forefront. My biases and previous experiences working in this context have led to the creation of this research project, and I see this as an emerging investigation which may continue. Ensuring I was reflective and self-aware throughout the study was essential. Examples of how I integrated this reflexivity into my research are vast, for example, I reflected and examined what path has led me to want to study this research, what thoughts, assumptions and validations have I felt from a long career working in the field of social-emotional learning. I was aware that as a champion of social-emotional learning I might be prone to wanting to find programmes that work and help children in this area. I examined how I might reduce this bias. I did this by studying and reading many critics of mindfulness, wellness and social-emotional learning in education and carefully considered those views alongside my own. In fact, I found this type of

reflection did lead me to question some of my own perceptions and change my views at times.

The potential bias of researchers is a substantial issue when it comes to the trustworthiness of a research study. Therefore, staying humble, being reflexive and thoughtful, spending adequate time preparing and collaborating with others so that triangulation is in place are vital steps for researchers to avoid bias (Poggenpoel and Myburgh, 2003). Cohen and Crabtree (2006) describe reflexivity as being aware of the effect of each step of the research on the researcher themselves and the research process through an attitude of systematically being aware of the knowledge construction process one is partaking in. Careful notes and files were kept ensuring data were accurately recorded. I was careful not to present any bias and to ensure that the interviewees felt comfortable and confident answering questions. As Cohen and Crabtree (2006) note that each researcher will use different perspectives, which could lead to different developments in a research project. However, they point out that each of these approaches could be equally valid. In fact, they state that rather than hinder the reliability of a study, those different perspectives could provide a richer way of interpreting complex data. Confidence in the truth of the findings, sometimes called the credibility of the research, is shown by embracing the trustworthiness model. In fact, 'credibility addresses the "fit" between respondents' views and the researcher's representation of them' (Tobin and Begley, 2004 as found in Nowell et al., 2017). Many of the ideas suggested by Lincoln and Guba (1985) to show credibility have been completed during this research. For example, prolonged engagement, means utterly understanding and appreciating the context. This was achieved by my long-standing relationship with Hong Kong kindergartens, my work in the field of mindfulness and also my intention to engage, be present and interact with the participants of this study, in the context of learning of their experiences and views. I also had to be aware and rise above my own preconceptions, or let them be known, and build trust with my participants, the staff I was working with and other academics during the process as advocated by Cohen and Crabtree 2006). Finally, I was able to

account for distortions in the data, for example, when participants after gaining more trust were more able to open up and tell their stories with more confidence.

Examples of how I navigated this reflexivity were to ask myself questions such as ‘What led me to that perception?’ and ‘Why did I conclude that?’. By asking myself these two questions throughout I was able to notice the times when I may have been leaning into my preconceptions and I was then was able to redirect to a more neutral stance. For example, during the study, I reflected and noted that I had expected parents to be quite negative about the prospect of the mindfulness programme, as my preconception was it would lower children’s academic contact times, but after speaking to the parents, I had to re-examine why I had thought that and how that may have steered my initial questioning as although some parents did object, many parents were also supportive of such a programme. Keeping a journal and constantly asking myself if I was bringing in assumptions helped me to notice these preconceptions and then course correct.

Persistent observation is another area where trustworthiness might be needed to show depth. Lincoln and Guba (1985) indicate that prolonged engagement helps the researcher and the readers of the research to be open to multiple influences and for the researcher to recognise those elements or parts of context that are most applicable and then being able to focus on that in detail. This was done by examining the preliminary data first and gathering those points of influences to examine further, as the research developed over time, I was able to pinpoint more interesting and relevant questions to ask in our final interviews and focus groups through this persistent observation.

Member checking was used to check the general ideas from the focus groups were accurate from the perspective of the focus group members. This was done by sharing with a few members the outcomes derived and seeking feedback on the outcomes.

3.92 Validity

‘Validity is defined as the extent to which a concept is accurately measured in a quantitative study’ (Heale and Twycross, 2015, p.66). Delving further, Bryman (2008) indicated that quantitative research includes validity, reliability, replicability and generalisability, whereas he indicated qualitative researchers look for transparency, relevance to users and reflexivity. While Creswell and Clark (2007, p.146) indicated that ‘because researchers collect, analyse and interpret both forms of data, traditional approaches to validity should not be minimized in mixed methods research’.

Lincoln and Guba (1985) describe one way of garnering external validity by what is termed ‘thick description’. This means recounting and explaining your research project in enough detail that a reader or other researchers can realise how to evaluate whether the conclusions of the research project would be transferable to different contexts or settings. Lincoln and Guba (1985) state this is one way the trustworthiness model can relate to transferability. My study was written in much detail or thick description as possible, in order to allow it to be replicated, for example, the full intervention is included in Appendix 12 along other details mentioned in Chapter 3. As a result, I am confident this research would be transferable to other Hong Kong International Preschool contexts.

Lincoln and Guba (1985) also indicate that credibility, dependability and confirmability can all be helped with triangulation of data which is what took place in this study. In fact, O'Donoghue and Punch (2003) indicate that the main aim of triangulation is to increase the credibility and validity of the findings, so it is a method of cross-checking data to find regularities or irregulates from multiple sources. I employed in-depth methods of triangulating the data from a rich background of sources including data from parents, teachers and children as well as pre and post and qualitative and quantitative data which resulted in a high level of triangulation. Dependability is created by showing a reasonable, replicable and clear process of documentation. This was done by explicitly describing the steps of the intervention and providing all the documentation linked to the intervention.

Zohrabi (2013) stated that internal validity examines the congruence of reality against the study findings. In other words, it looks at how closely the researcher measures and examines that which they stated was designed to be examined and measured. External validity is the degree that this research is generalisable to other preschool settings.

Internal validity or face validity ensured that the survey instruments and interview questions were clear and unambiguous. The pilot study tested the proposed instruments. Adjustments were made to the survey questions as required to ensure validity by rewording questions that participants noted were unclear. These tended to be questions with a double negative which were then reworded.

3.10 Ethics

The research study was approved by the University of Bath's ethics committee before it was initiated; thereafter, it followed the British Educational Research Association (BERA) guidelines (BERA, 2011). Several issues noted by Shamoo and Resnik (2015) relate to the ethics of this research including human protection, that is ensuring no harm would come about to participants, social responsibility, that is ensuring that research takes place to promote social good and not cause harm, confidentiality of all documents, communications and names, and objectivity, that is disclosing any personal or financial ties to the research.

Regarding the issues surrounding confidentiality and anonymity, informed consent was obtained (Appendix 2, 3); as recommended by Sarantakos (2005), and contact details such as my email and phone number were provided if the participants required further information before deciding to participate. The consent document indicated who I was and why I was conducting this research. It also informed participants about the procedures of participating, the purpose of the research, the amount of participation expected and an assurance concerning the confidentiality of

the results. This document also guaranteed that the parent or teacher could withdraw, if needed, at any point without providing any reason.

Permission was also sought from parents to examine their child's classroom work and documents for this research. This examination of classroom documents would cause no harm. Since the mindfulness curriculum was to be implemented regardless of this research and as part of the regular school development plans, in discussion with my supervisors, it was determined that parental permission was sufficient to examine the classroom documents, assessments and work. However, I fully believe that children's consent to share their work, for example, in their portfolios or on displays, or to have their photo taken, as well any consent to any physical contact is vitally important. These type of consent procedures were already in place in the schools and children had the option to say no if they did not want to share their work or have their photo taken as part of the regular ethos of the schools. Teachers had been trained on obtaining children's consent and teaching children about consent in different areas of their lives and Article 12 of the United Nations General Assembly (1989) which discusses children's rights, and all schools had and a policy in place on such matters. In line with the regular school policy, children's permission was sought to share their drawings and voice for this project.

This research paper does not include the names of the schools or the participants. All names were secured in a confidential manner and not disclosed by creating an identifier code for each participant. Coding with identifiers was also used to conceal names of schools and other identifying factors. Pseudonyms replaced any names mentioned in the interviews or children's drawings in this document. I assured parents and teachers that only I would come to know the end results, and these would not be shared with the management of the schools or with any other person. Moreover, I asked participants in the focus group interviews to keep the information they shared in a confidential fashion. Data that identifies individual participants was destroyed after analysis, as recommended by Fink (2008). I invited participants to an optional session to discuss the study findings. A thank you letter was sent to all

participants. Ensuring the confidentiality of these results was crucial to the ethical base of this study.

Regarding the issue of human protection, Begoray and Banister (2012, p.4) indicate that reflexive researchers ‘attend to an ethic of care’ when working with participants. They also indicate that a researcher should be reflective about their duties towards participants and engage in mutual dialogue and understanding to ensure this happens. In face-to-face interviews, I used the utmost care to ensure participants felt safe and secure. Carefully worded questions were framed and as the interviews proceeded, I asked the participants if they were feeling comfortable; thereby, ensuring the questions caused no harm. I was aware that questions discussing the stress in Hong Kong society may be a trigger or induce stress in the participants so took care to frame these questions and steer the discussion from spiralling into a depressive state. Burke Draucker, Martsolf, and Poole (2009) suggest that some protocols to reduce such stress include consistently monitoring of participants' emotional reactions, offering breaks if needed and debriefing participants and these were all in place.

Other ethical issues that informed the design of the intervention included wanting to ensure all children were involved and experienced the intervention, so both intervention and waitlist groups did receive the intervention, albeit with slightly different timings. This approach is in line with common ethical practice in research which advocates for waitlist groups to be used to ensure equal opportunity in mental health interventions (Leschied, Saklofske and Flett, 2018).

Finally, as I pointed out earlier, I shared my ongoing relationship with the preschools and my role in Chapter 1 and below in the Limitations section. I have received no financial compensation for this research.

3.11 Limitations

In order to be reflexive, I would like to acknowledge some of my biases and preconceptions. Firstly, I am a consultant and an ‘insider’ in this group of schools

and so have my own thoughts, expectations and background concerning what is possible within this organization. I was also the main designer of the curriculum used in this study which could present bias, as my objective is to always run beneficial programmes for the students I work with and that would mean I would hope the programme would be worthwhile. In stating that, all programmes used within this school group were bespoke, and this was no different and to be used internally within the group; however, I had to constantly reflect on this area to ensure my perceptions of the results were not skewed. Drake and Heath (2010) noted that being careful to remain objective and maintaining a critical stance during the data gathering and analysis process is vital for researchers. I retained my objectivity, although I am an 'insider'. I maintained an objective distance from the preschools as they did not employ me and by being aware and reflecting at each stage on my thinking and biases. I did this by employing the Lincoln and Guba (1985) model of trustworthiness in this research as discussed earlier in this chapter.

The sampling process and the analysis of quantitative data in this study lead to inferential rather than causal findings and conclusions. Therefore, these results should only be taken as indicative and may not be relevant to broader applications.

Finally, the conditions of the design allow for non-blind parent and teacher reports, i.e. each participant knew whether or not they belonged to the Intervention Group or the Waitlist Group.

3.12 Summary

This section of the study described the methods to be used in order to gather the data and how it was analysed. A mixed methods approach was employed to triangulate findings pertaining to the three parties: children, parents and teachers, using a variety of qualitative and quantitative data. Surveys focus group interviews, children in-class measures, drawings and their voices scribed by the teacher are included in this analysis.

Chapter 4: Findings

4.1 Introduction

This chapter examines data associated with my research questions and my findings. I discuss the quantitative and qualitative data and present any links amid the collection and interpretation of both using a mixed methods analysis and Mosaic approach.

The chapter is laid out sequentially, taking the reader through the process of the research in the order it occurred. Described first in this chapter are findings from the initial parental and teacher survey results. Analysis of initial survey results examined responses for theoretical relevance that warranted further investigation. This analysis of the initial survey responses led to the development of the parental and teacher semi-structured interview questions. Next, I outlined the concepts and themes discovered in the interviews in detail. After, I examined data from the classroom documents that included children's drawings, children's voice and teacher observations. I analysed the findings of both parent and teacher post-surveys and interviews. Finally, I combined all the data together and analysed and triangulated the findings.

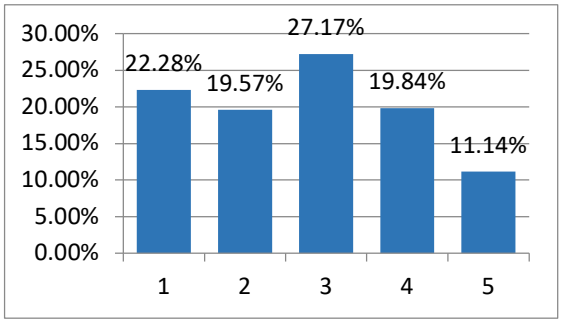
4.2 Parental Pre-Intervention Findings

The first step in the data collection was the dissemination of the survey and the collation of the results. The survey purpose was to collect general information and to prepare for the semi-structured interviews which followed and to gather pre-intervention data that could be compared post-intervention. The teacher and parent surveys and interviews were concurrent, but I present parent and then teacher data here for clarity.

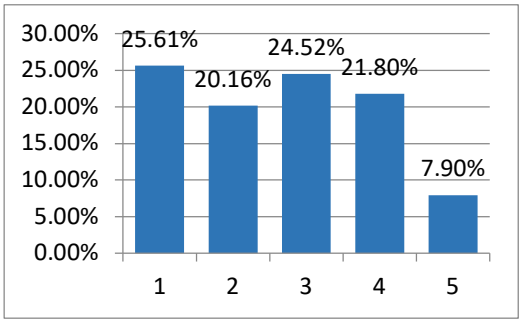
4.21 Parental Pre-Intervention Survey Results

The data from the presurvey for parents show results from both the Intervention group and the Waitlist Group combined, that is all parent participants. This was done to gauge the levels from the whole dataset of parents. One of the initial findings was that parents were quite divided in their current knowledge of what mindfulness was. When I examined the data, I saw that parents have quite varied responses to the statement 'I am familiar with the term mindfulness' with a range across the possible scores. Only 7.9% of parents indicated they 'practice mindfulness in their daily life' as most true; however, again there was a range across the scores. This statement links to the findings of: 'My child already practices mindfulness', not surprisingly parents who were more familiar with the term say their children have a mindfulness practice, although a lower rate than themselves. As a reminder, the scoring system rates 1 as least true and 5 as most true. See Graphs 1,2,3, and 4 below.

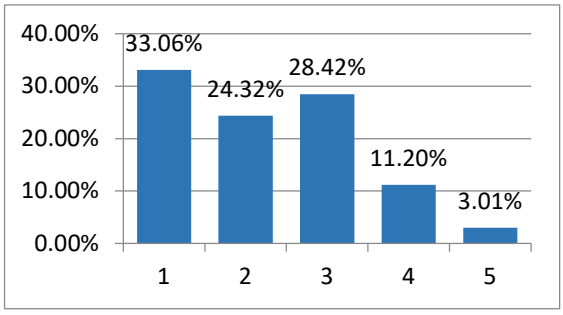
***Graph 1**: I am familiar with the term mindfulness*



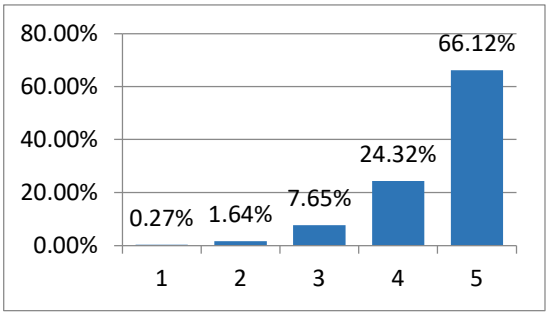
***Graph 2**:I practice mindfulness in my daily life*



***Graph 3**: My child already practices mindfulness*

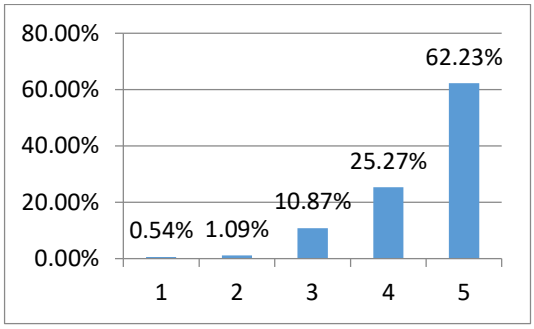


***Graph 4**: I believe it is important for preschools to teach children to be kind*

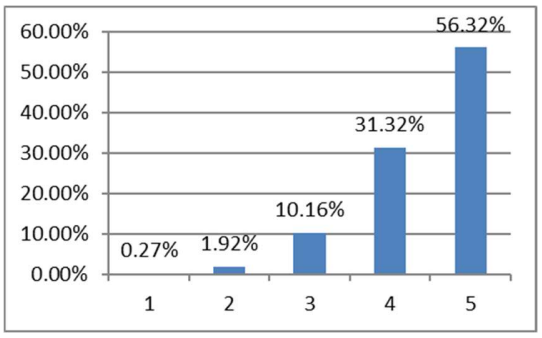


When I analysed data related to the statements of whether parents believed it was important to develop well-being dispositions in their children, I found the results showed the majority of parents reported strong feelings that these concepts were important preschool. For example, 66.12% of parents indicated that they believe it to be most true that it is important for preschools to teach children to be kind. See Graph 4, 5 and 6.

***Graph 5**: I believe it is important to teach children how to focus their attention*



***Graph 6**: I believe children need to learn skills to improve their self-regulation*

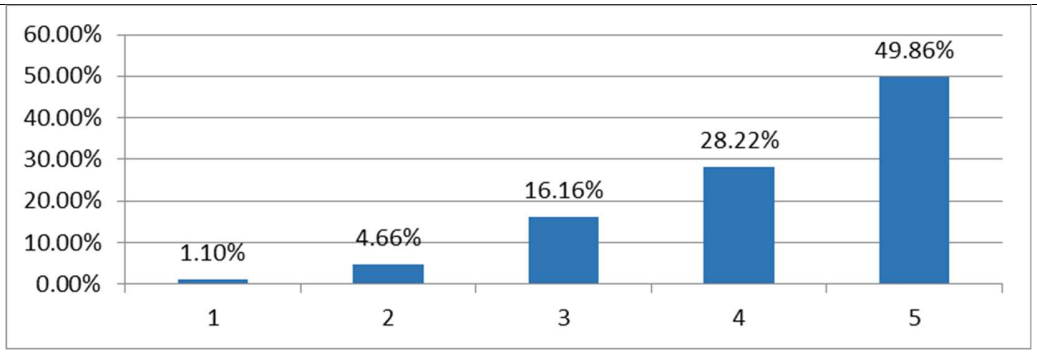


While the data was highly positive in indicating that parents want these skills to be part of preschool, the data cannot explain what parents think that would look like or what expectations they would have, in each area examined. This area was vital to delve deeper into in the interviews as from my professional experience parents in Hong Kong might want these skills to be taught but they also might not want academic time to be reduced to accommodate this. Therefore, it was important to explore their feelings and see what the responses were. Also based on the literature (Wong and Rao, 2009; Rao and Li, 2009; Rao and Koong, 2000), I wondered if parents would be willing to allow for this learning as children grew older and more preparation for primary school was thought to be needed.

Yip (2016) showed that Hong Kong students experience high levels of stress, I was interested to learn more about the apparent stress of Hong Kong students and to see if parents perceived Hong Kong as being a stressful school environment and, if so, when this stress began.

One of the findings that came out of the survey was a very high portion of parents believed Hong Kong children experienced more stress than their Western counterparts. 49.86% and 28.22% of parents rated this a four or five where five was most true and one was least true. Less than 6% of parents scored this a one or two. See Graph 7 below.

***Graph 7**: I believe that Hong Kong students experience greater levels of stress than those in Western countries*



4.22 Linking the Initial Pre-Survey Results to Development of Parental Semi-Structured Interview Questions

The next step was to develop the questions for the semi-structured interviews based on the data. One area to learn more about were the differences in mindfulness-awareness and practice within the parent population. I was curious to hear what types of practice and awareness parents had and how they transferred that to their children. I also wanted to explore what those parents who had no knowledge of mindfulness were thinking about this curriculum coming to the school.

Another area I was particularly interested in learning more about was the high levels of stress parents reported they believe Hong Kong children experience and how this linked with Bronfenbrenner's ecological systems theory. It was important to know what contributed to this stress and when it started. It was important to explore the activities that children did afterschool and, on weekends and if this also affected stress in any way. Chan (2010) and Chun (2003) explored that there was some

stress linked with the transition to primary school and I felt it appropriate to explore this further, too.

Another key area to explore was how parents viewed the mindfulness curriculum, whether positively or negatively. I acknowledged that there is only a limited time during the day but wanted to explore the priorities parents felt were vital in their child's schooling, after the survey results showed such high results for areas linked to well-being to be taught to young children. I also was interested in this topic due to the research from researchers (Rao and Koong, 2000; Pearson and Rao 2006; Rao and Li, 2009) showing that parents sometimes pushed schools to favour academic content over play or other non-academic content. Appendix 8 shows the questions I developed based on the survey data. The focus group was conducted with selected parents from the Intervention Group; this was done so that we could compare the pre and post interviews later with the same group of parents whose children had experienced the intervention.

4.23 Parent Semi-Structured Interviews in Focus Groups, Pre-Intervention

After conducting the parent interviews in focus groups, with those parents the Intervention Group, nine concepts emerged with three main themes. The three main themes were 1) Alarm and Concern 2) Feeling Trapped in the System 3) Academic Concerns. Figure 4 shows a visual representation of the parent concepts and themes in a thematic map.

The interview questions were helpful to steer the interview conversations, but parent participants brought up other issues which we discussed as well. This organic dialogue led to the collection of rich data.

When we moved on to the measures for concern for others, empathy and kindness, self-regulation and focus, prosocial behaviour and social competence, interview responses identified that many parents found all these areas important. However, focus and self-regulation appeared to be areas that parents were most concerned about developing. Parents were concerned about how the curriculum would affect academic subjects.

Alarm and Concern

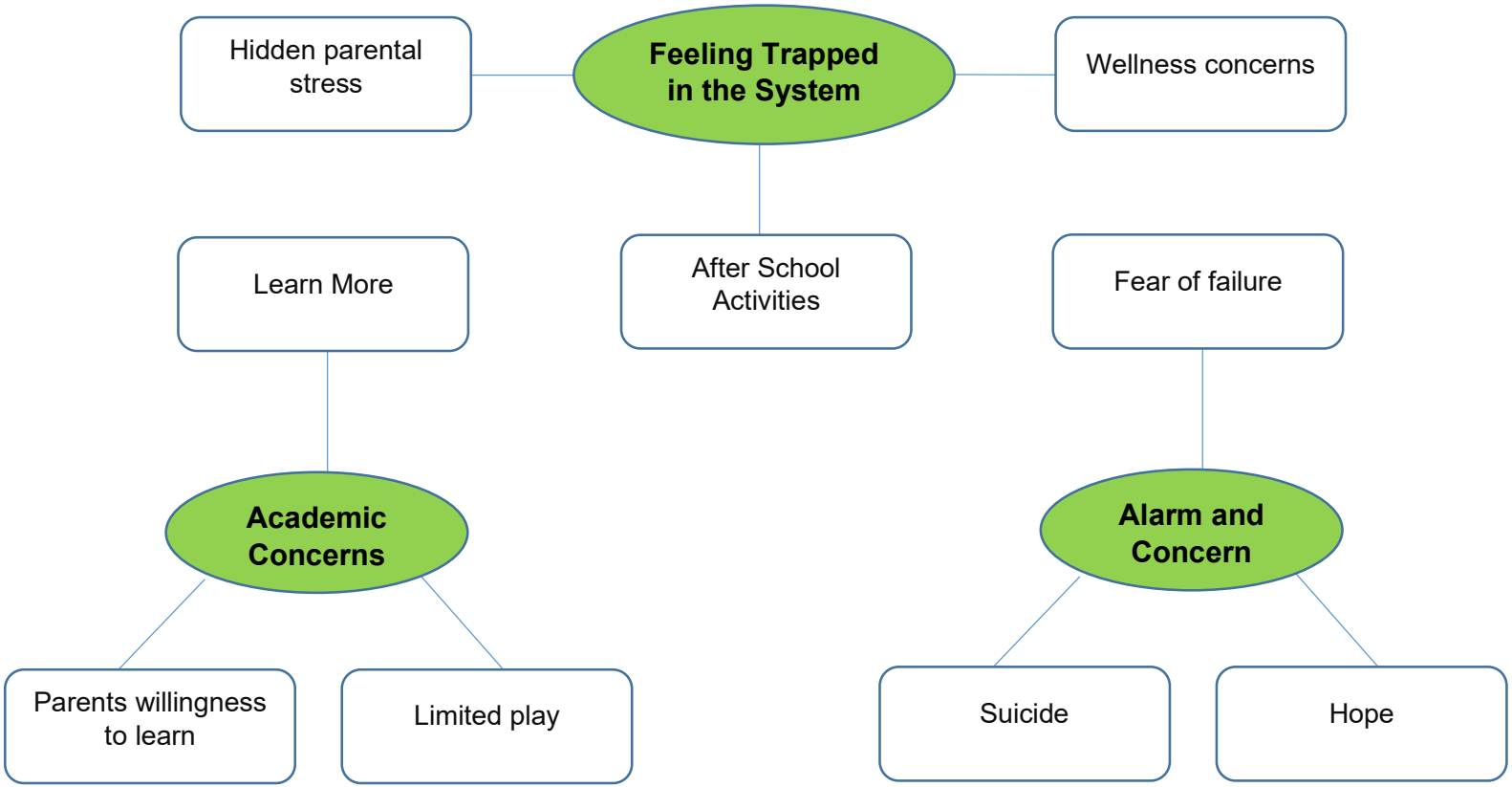
One concept of concern that emerged among parents related to the general well-being of children in Hong Kong. The participants brought up their own feelings of stress as well as the apparent stress of students, including young children. Although parents indicated that they felt stress became worse as students progressed in age, many acknowledged that even preschool was now a stressful time due to entrance exams to enter both preschool, as discussed by Rao et al. (2003), and primary school. Respondents said these young children's lives were filled with preparations to ensure their child had the best chances possible of entrance to the best schools.

Alarmingly, all but one group of parents raised the issue of suicides among local children, stating this was the result of the stress experienced by young people in Hong Kong. They were determined to work with schools, government departments and other resources to find a solution. Parents also noted they were not happy with the government response to childhood stress and suicides indicating that the government had not adequately addressed this problem. Once this conversation started in each school parents were very animated in their discussions and apparent fear of the situation. One parent was moved to tears in this discussion saying she feels very worried about the state of the education system and how it will affect her sensitive child.

The fear of failure that children experienced was another concept that developed among parents. Parents stated that children were constantly under pressure and schools, even preschools, were competitive with many competitions such as music shows, storytelling, pageants and others and that the children want to be winners in every instance. Many parents said their child gets angry or upset if they do not win and this again places pressures on the students. Another area that emerged was the concept of hope. Parents exhibited hopefulness that mindfulness may be a positive solution to help their children manage their stress levels. Several parents noted that they as parents would also like mindfulness lessons and hoped that they too could reduce their own stress.

Figure 4

Thematic Map Parent Pre-Intervention Interviews: Concepts and Themes



These concepts formed the theme of alarm and concern. Parents spoke in emotional tones and had strong body language showing they were very worried and concerned, alarmed even at the current situation. Table 4 gives examples of the concepts and theme 'alarm and concern' from the interviews.

Table 4: Samples of verbatim examples of parents discussing 'alarm and concern'	
Focus Group 1 Children are more and more stressed out. It is in the newspapers every day. We have many competitions in the schools and also the students feel that they cannot fail.	*Focus Group 4* I think that we need to teach our children to be happier and to know how they can be not feeling stress. This means the parents and the schools should work together. Nowadays it is very concerning for parents to read about the problems students are facing.
Focus Group 1 School interviews make many parents and children feel a great deal of stress and we need to prepare for several years to get a good result. This period is very difficult for children and parents.	*Focus Group 5* I think well-being is a new topic in the education department. They need to address this as soon as possible because many students in Hong Kong feel very stressed out and they don't know how to handle it.
Focus Group 3 The government needs to fix this issue in schools. Several children commit suicide last year. This is a very worrying thing for us as parents. Also, those children were not failing; they were the top students, but they got a bad mark.	*Focus Group 7* I think that our students have much more stress than in the West. Our school system is you must take a test to enter even when you are two years and then you are working to enter a good primary school. It is very difficult for parents to manage this.
Focus Group 2 Students are committing suicide in our society. It is terrible. We are so worried about that. I really want to know how to protect my daughter.	*Focus Group 7* Hong Kong children are more stressed for sure. In the UK they are playing and free but here they need to learn many things and keep up so they can survive the process.

Feeling Trapped in the System

Parental stress was one concept that emerged. The highly competitive nature of school admission in Hong Kong was of great concern to the parents. Parents indicated feeling high levels of stress in that they cannot change the system and as a result provide their children with more structured learnings from a young age. Parental stress was discussed at length as parents struggled to find a way to help their child without revealing their own stress to their children.

Another concept that emerged was related to afterschool activities and classes. Many parents stated that although they did not think taking their children to so many after-school and weekend classes was good for their child, they felt they had no choice but to remain competitive. However, other parents disagreed and thought their children were lucky to be able to learn so much and take the many after-school courses. On average parents noted their child attends seven extracurricular activities per week. This links back to the research from Wong and Rao (2015), indicating that the highly academic nature of preschools is sometimes to the detriment of children's well-being.

Other concepts raised were concerns about wellness and lack of freedom their children experienced as a result of the school systems rigour and procedures. Children lead very structured lives according to parents. These concepts formed the theme "feeling trapped in a system" due to the requirements to enter preschools and then primary schools and the pressure of not being able to remove oneself or one's child from that system. Table 5 gives examples of the concepts and theme 'trapped in the system' from the interviews.

Table 5: Samples of verbatim examples of parents discussing 'trapped in the system'	
Focus Group 1 Yes, my child has so many classes but this in Hong Kong style. We need to prepare for primary school interviews, and we need our children to learn more,	*Focus Group 6* Choosing the kindergarten is very important in Hong Kong. If you go to a good kindergarten your child can learn more and the school will help them to pass the interview for primary school.
Focus Group 2 I feel very stressed out as a parent. I don't know what can I do. This is the system in Hong Kong if I just ignore the system my child will lose all her chances and if I follow the system, she will be very busy. I try to not show my stress to her, and she seems to be happy.	*Focus Group 6* I think that children are mostly happy, but they have a hard time to feel failure here. They have a happy home life and parents try to do their best for their child but there is so much lack of free time and play because they need to learn many things.
Focus Group 4 I know I want my child to go to the park and play and be relaxed but this is not possible. Children must do many lessons to prepare for primary school. They must go to extra class to learn things they are not learning in school.	*Focus Group 7* I think the main thing I would like for my child is to feel happy. I think he is happy but sometimes maybe he will feel a bit nervous because he needs to pass a test or do the competition, but I think this is good for the child to learn when they are young otherwise, they cannot adjust in primary school.
Focus Group 5 My daughter is attending classes three afternoons and all day on Saturday. She is taking music lesson, science club, Phonics, Speaking, swimming and cooking programme. She is a bit tired, but these classes are enjoyable, and she can learn a lot.	Focus Group 7 Primary school entrance is very stressful for the children and also the parents. We must choose a good kindergarten so they can pass the test. I try not to show my daughter I am feeling stress before the interviews, but it is difficult. I enrolled my daughter in a class to teach her how to do the primary interview.

Academic Concern

One concept that emerged was the limited play time Hong Kong preschoolers experienced at home and school. Parents stated that play was not a priority and that interest classes were a more crucial use of their child's time. Parents were also very compartmentalised when discussing their child's learning as math, science and other subject-based ideas and did not appear to be convinced that play was useful in schools. Play seemed like a luxury that could only be imparted when all the academic learning was complete.

Another concept that emerged was that although parents generally reported they wanted their child to experience mindfulness in preschool, some parents were concerned about when the timing would fit in. They were also concerned with what academic work the children might miss as a result. This links to the research from Chan and Chan (2003) which discussed that parents pressure schools to increase academic performance.

The concept of parents' willingness to learn was interesting. Parents were very eager to take part in the study and to learn more themselves. They had many questions about the research about mindfulness in general and several parents said they had done research on the internet to learn more themselves.

These concepts created the theme Academic Concern which encompasses parents' feelings, stories and emotions linked to the priority placed on their child's academic achievement, not necessarily because they feel that is the best but that they feel it is necessary in the Hong Kong school system. Table 6 gives examples of the concepts and theme 'academic concern' from the interviews.

Table 6: Samples of verbatim examples of parents discussing 'academic concern'	
Focus Group 2 I think this is a good idea, but I am not sure because the time is very short only three hours how they can do it without removing the important subjects.	*Focus Group 6* I want my child to learn this in school. I think this is very important both school and the parents need to work together. Can we have training for parents on this also? Then we can help more at home.
Focus Group 3 I know it is good for children to play more but here we also need to study more because we do not want our child to be behind the others.	*Focus Group 7* I think this is a good programme maybe it can be afterschool programme because the school time they need to learn so many things.
Focus Group 4 My child is very kind and helpful. I think these things are taught at home. I think it is good to have a small part in school but in kindergarten they need to also learn English, math, science Putonghua and other things.	*Focus Group 6* My daughter has some stress. The doctor said she needs to learn to be more relaxed. I think that this course will be helpful to her.
Focus Group 5 in kindergarten it is very important to learn good English so our children can go to a good primary school. I think if this programme is helpful to help them be calm on the exams this is a good idea.	*Focus Group 7* Our system is quite hard. My sister lives in UK and her son is very free playing all day long but here we cannot let our children play all the time. We need to focus on learning.

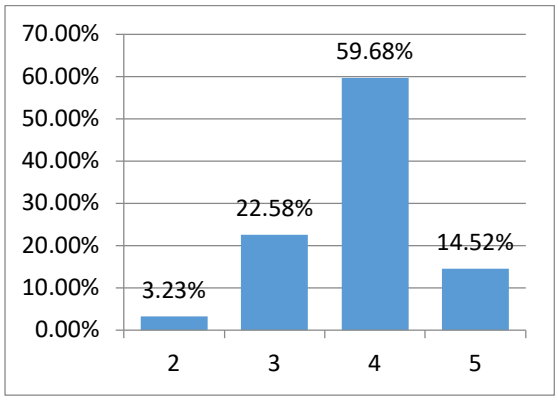
4.3 Teacher Pre-Intervention Findings

As mentioned above the teacher pre-surveys and interviews were conducted in the same time frame of the parents' survey and interviews. These survey results were from both the Intervention Group and the Waitlist Group as I wanted to compare the two groups data pre and post intervention.

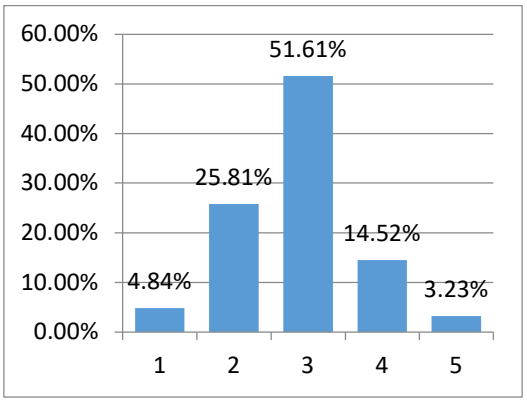
4.31 Teacher Pre-Intervention Survey Results

Like with the parents, there was a mix of results from the teachers' surveys with including both the Intervention Group teachers and the Waitlist Group of teachers about the degree of familiarity with the term mindfulness. For most teachers, the term was familiar, which one would expect, as they had recently completed the teacher training. No teachers mentioned that it was not familiar. Most teachers indicated that they had some form of practice of mindfulness in their daily life, possibly since the training albeit not at very high levels. This area was something I was keen to explore more. See Graphs 8 and 9 below.

***Graph 8**: I am familiar with the term mindfulness.*



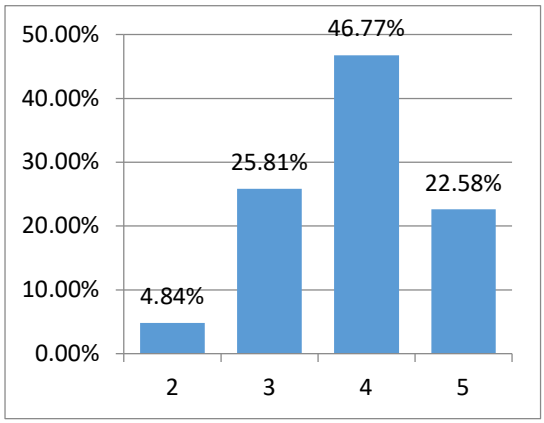
***Graph 9**: I practice mindfulness in my daily life.*



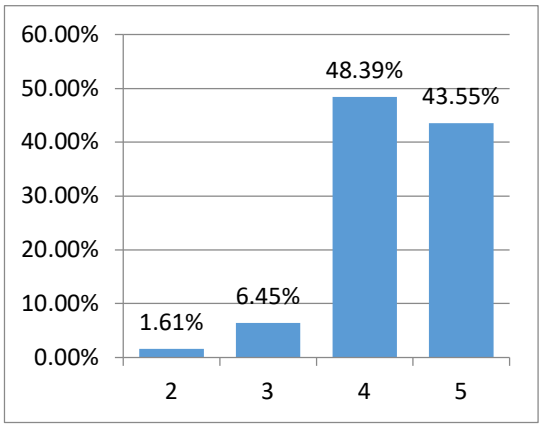
The teachers noted they were receptive to the idea of the preschool adding in a mindfulness programme with 46.77% and 22.58% indicating 4 or 5 on the scale. It was essential to find out more about their perceptions and why this might be essential and what aspects they were interested in developing in this area.

Teachers noted they believed that Hong Kong children would benefit from improved well-being and that mindfulness could be a useful approach to doing so with 43.39% and 43.55% of teachers scoring 4 or 5. See Graphs 10 and 11 below.

***Graph 10**: I believe mindfulness should be added to the preschool curriculum*

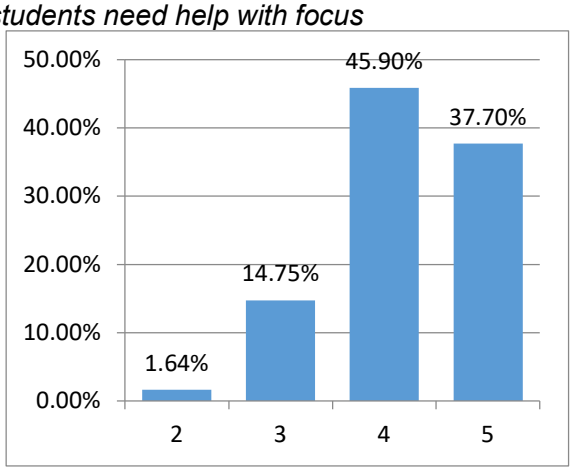


***Graph 11**: I believe children in Hong Kong need to learn skills to improve their well-being*

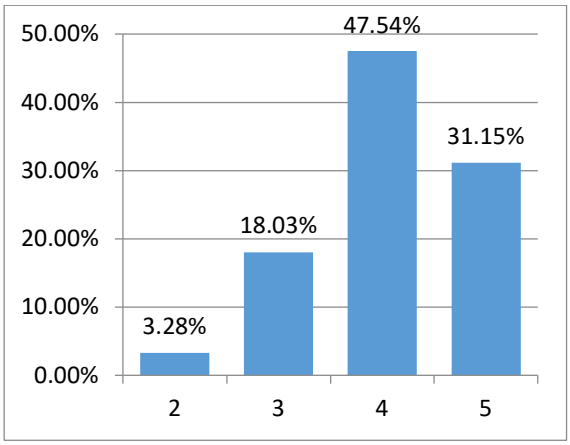


The teachers' survey asked teachers to give a range for their class in the areas of needing help with focus, showing kindness to others, the ability to focus and learning to manage emotions. The results indicated a range of answers, but the fact that the majority of teachers rated these highly is indicative that they believe their students needed help with these ideas. See Graphs 12 and 13 below.

***Graph 12**:I believe my students need help with focus*

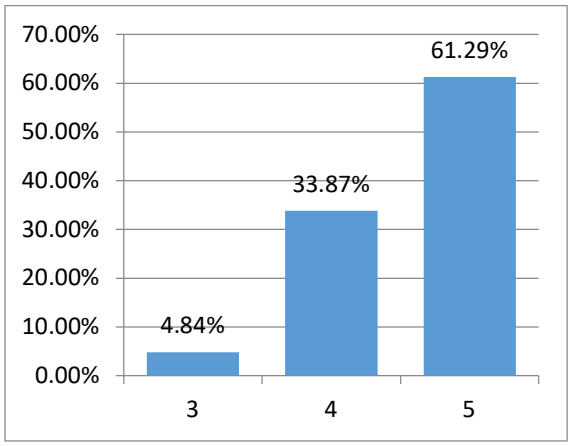


***Graph 13**:I believe my students need help showing kindness*

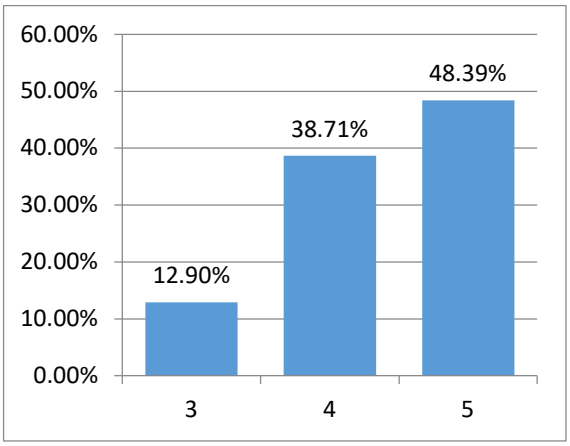


As with parents, teachers found that children in Hong Kong experienced higher stress levels than their Western counterparts and interestingly, teachers noted this more strongly than parents. This finding could be because many of the teachers were expatriates from Western countries or that teachers see something in the children in their classes that parents were not aware of, this was an issue to delve into in the interviews. See Graphs 14 and 15 below.

***Graph 14**:* I believe that Hong Kong students experience higher levels of stress than students in Western countries



Graph 15 : I believe preschool children should learn to manage their emotions



4.32 Linking the Initial Results to Development of Teacher Semi-Structured Interview Questions

These results led to the development of the interview questions below in the same way as the parent focus group interviews. Interviews were flexible and additional ideas came into fruition as the conversations developed. All teacher participants from Intervention Group and Waitlist Groups took part in these interviews this was to gauge the full range of thoughts of the teachers in the schools since nearly all teachers participated and would be implementing the curriculum at some point.

The areas I was most interested to learn more about were what specifically teachers felt were noteworthy, and why. Areas of study discussed related to prosocial behaviour, empathy and concern for others, self-regulation and focus and social competence. As mentioned above the area of young children's stress was also something it was important to learn more about since stress and well-being are closely linked as mentioned by several researchers (The questions developed can be found in Appendix 9).

4.33 Teacher Semi-Structured Interviews in Focus Groups, Pre-Intervention

Teacher focus group interviews identified eleven concepts, which grouped into three main themes. The themes discovered were 1) competitive context, 2) parental pressure 3) overprotected children. Figure 5 shows a thematic map of the teachers' pre-interview data.

Competitive Context

One common concept stated within the teacher groups was the high-pressure environment and way of life in Hong Kong. Most did not know of any solution or way to change it. Teachers acknowledged that parents were very caring and had their child's best interests at heart. However, they recognised children were overscheduled and many children seem tired and exhausted in the mornings from the amount of work expected of them.

Teachers stated across the groups that their students were overscheduled. They said the students participate in several music and singing competitions, sports day competitions, speech competitions, 'Little Reporter' assignments, and parent and child competitions. Teachers noted that when they promoted home school projects at Christmas, Easter, and other times of the years, parents present elaborate displays that were not created by the child. They felt children were overscheduled, tried to learn more than required of them, and be better all the time. This constant pressure on students led to them being tired and exhausted. They stated children were often tired and difficult to motivate due to being under pressure with so many activities.

This theme of competitive context emerged from these findings. Teachers indicated that Hong Kong has a highly competitive schooling system. Many of the native English teachers who come from Canada, the US and the UK were shocked about the amount of competitions, the school's insistence that everything appears perfect in front of parents and the competitiveness to enter both the preschool itself, and the primary school entrance procedures. Table 7 gives examples of the concepts and theme 'competitive context' from the interviews.

Table 7: Samples of verbatim examples of teachers discussing 'competitive contexts'	
Focus Group 1 It's crazy some of my students have 7 or 8 afterschool activities. They are so tired, they are shuttled from lesson to lesson.	*Focus Group 5* Parents know every detail about the school. They are so worried about their children. They will address the teacher for very small things like if their child doesn't know something, they think they should, they will ask why it was not taught…I think this puts a lot of pressure on us and it's hard to fit everything in already so not sure when we can do this.
Focus Group 3 Some of the kids in my class are literally falling asleep they are so tired.	*Focus Group 6* I think this is needed in Hong Kong. I'm a bit worried about how much time it will take but I think if we incorporate the mindful moments that will be the best part for both us and the students. I think the parents will be supportive of this as long as they don't see anything taken away.
Focus Group 4 Kids are tired that is what I see. They are doing all these clubs; homework and they have no time to just relax and play. When we brought in the teaching strategies and more play, I think it was three years ago I remember it was hard for the parents to understand how their child was learning. We had to do so many parent meetings to explain how young children learn and how somethings like forcing them to write was not correct.	*Focus Group 7* The kids are so overscheduled it is not funny. They are shuttled from class to class by their nannies. We even have five afterschool clubs here. They are not allowed to be kids and have time to imagine and create.
Focus Group 4 I think that the pressure on students and teachers is huge. It starts when they are born. The other day I saw a Michelin star cooking class for 18-month olds. It's so competitive and the parents love their child so much, but they put unfair expectations on us, the kids are only here for 4 hours but they expect them to know so much.	*Focus Group 9* Teachers are the ones who are under pressure. There is always more to do. Another show, a competition to prepare for and more things added to the curriculum plus all the paperwork. I hope the curriculum will help me ha-ha!

Parental Pressure

Teachers' stress emerged as a concept. Teachers noted that they could feel the pressure parents were under due to the school system in Hong Kong, and in turn, they place pressures on the teachers. Teachers felt that since parents were under enormous pressure to help their child enter a good primary school, they were overly interested and involved in their child's kindergarten experience, meaning that they want to be aware of all the academic progress and tactics that their child is learning. Parents become upset if children do not do well academically, for example, if they do not get perfect marks on a spelling test or if the teacher marks something wrong in their bookwork, they would like the teacher to explain what happened. Teachers indicated they felt stressed at work on a regular basis and that much of that pressure comes from the parents and the school administrators. Several noted that they had worked in other preschools in Hong Kong and the situation was the same, that this is a Hong Kong issue.

The pressure of the school system in general emerged as another concept. The teachers noted the system is hard to manage and they feel pressured to prepare children for primary school but at the same time they want to allow children more playtime and hands-on experiences. They were very vocal, especially when the interview season starts of the expectations placed on children and therefore on teachers. Many teachers could not see a way out of the system unless children joined the international schools that expatriate children in Hong Kong tend to do but stated this is outside the price range of most parents.

The teachers also discussed the children's fear of failure and many indicated they felt this came from pressure from parents. Parents, teachers noted, out of a place of love, want their children to succeed in everything and that in turn created a system where children could not accept failure. This is very apparent with the journal work where teachers reported children would want to erase if they did not feel their drawing was perfect. In writing, it was not acceptable in the children's eyes, to make mistakes. Table 8 gives examples of the concepts and theme 'parental pressure' from the interviews.

Table 8: Samples of verbatim examples of teachers discussing 'parental pressure'	
Focus Group 1 I get along well with my parents, but they are super demanding. It is so different than when I was teaching in the states. They want the best for their kids, but I think we need more parent education classes, so they understand why we are play based because that was very hard for them to adjust too.	*Focus Group 5* Parents know every detail about the school. They are so worried about their children. They will address the teacher for very small things like if their child doesn't know something, they think they should, they will ask why it was not taught…I think this puts a lot of pressure on us and it's hard to fit everything in already so not sure when we can do this.
Focus Group 8 The parent-teacher interview days are crazy. They are so competitive. They want to know what rank their child is, how they are compared to the others… and if you mention anything you have to be so careful how to phase it or they will get so upset. They want perfect children.	*Focus Group 6* I think the parents are supportive especially if you compare to my old school in UK. The parents go all out when we ask for their help. But it is very different here, they are so concerned about their academics and also about care like what did they eat and for the whole day students how long they slept.
Focus Group 3 The parents say they want to have well-being but if you skip anything on the weekly, they freak out and want to know why their child doesn't know how to do it.	*Focus Group 7* Parents help when we ask for it. But sometimes they project we send home you can tell the parent did it on their own. They are so perfect. When things are shown to others the parents like to show their child is the best.
Focus Group 3 Parents are so worried about the entrance to primary so they put a lot of pressure on us especially in (*5-year-old classrooms)* to make sure they can answer questions, do the math and that their portfolio is very good.	*Focus Group 4* I think it's so competitive here. Everyone is on a mission. If you read those social media boards, they are crazy how they compare the schools and post any little thing they see as negative on it. It makes it quite stressful to be a teacher to be honest.

Over-Protected Children

Another concept that appeared in the interviews was that teachers felt students lived in a helper culture. In a country were many children, and certainly those who attend these quite costly school-fee paying kindergartens, have a full-time live-in maid or ‘helper’. Teachers indicated that sometimes children may lack the opportunity to learn to do things for themselves. Teachers noted that children often appeared helpless, if, for example, they spilt water on themselves or if they got dirty with paint. This experience was in sharp contrast to teachers experiences in the West where children loved to finger-paint, play in mud and the like.

Teachers felt they spent a great deal of time teaching children basic life skills such as handwashing, changing clothing and tidying up; however, they did not feel that the children were very able to manage the snack time rituals at the school. Another concept that emerged was the children, due to being overprotected, seemed anxious at times when they get dirty or they cannot do something. This anxiety was prevalent in the classroom’s teachers stated. For example, some students would cry or become agitated if they could not complete their bookwork quickly enough.

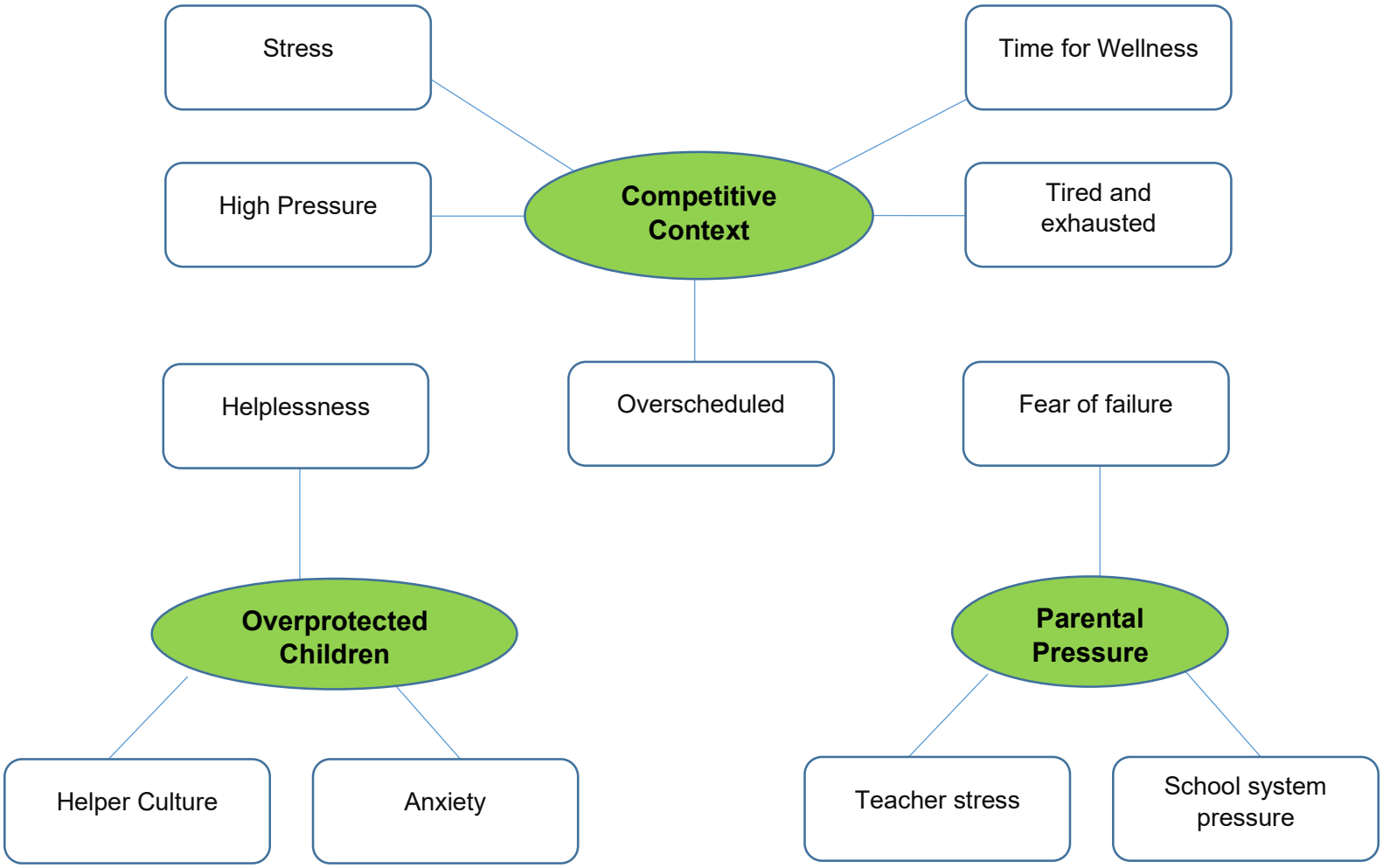
While teachers stated most children seemed happy on a day-to-day basis, they could quickly become anxious during typical Hong Kong procedures such as spelling revision or letter copying.

Table 9 gives examples of the concepts and theme ‘children over-protected’ from the interviews.

Table 9: Samples of verbatim examples of teachers discussing 'over-protected children'	
Focus Group 1 The kids can do a lot, but they are very overprotected. Like the nanny buttons their jacket, feeds them with a spoon -things they should be doing on their own, so they become a bit helpless about certain things.	*Focus Group 4* I think the kids lack some basic life skills in Hong Kong. They have maids to do everything for them and so some of the things I expect from Canadian children you don't see like drying hands, putting on apron….when we added this to the curriculum it was hard at first but now the kids are all doing it.
Focus Group 1 Parents tend to worry so much. If a child does something in the class to another child, we will definitely hear from the parents and why the teachers wasn't paying attention, anyway it puts a lot of pressure on us as teachers.	*Focus Group 6* You see like kids refuse to get dirty. They are taught not to get dirty from so young so like half of them refuse to play in the sand or when we did finger painting, they would say 'No dirty' and if they get a spot of paint on the uniforms the parents also get very upset and want to know why the teacher didn't take care of their child
Focus Group 2 For sure the parents want the best for their kids but a lot of the time we are dealing with the helpers who are so worried about being told they aren't doing their jobs that they do everything. Some parents try but a lot of the helping around the house or putting things away doesn't involve the child, so they don't learn those skills.	*Focus Group 7* Some of the kids in my class seem to need help to do everything, like putting on a jacket, putting things away, blowing their nose….the helpers do it all then they come to school and they can't manage to do basic things.
Focus Group 5 Self-regulation would be very important, I think because kids here are used to having so many things done for them, sometimes they can't manage themselves well.	*Focus Group 6* The students are quite overprotected. A lot of things they should do for themselves are done by the helpers. We have to show them a lot in the class like how to clean up.

Figure 5

Thematic Map Teacher Pre-Intervention Interviews: Concepts and Themes



4.4 Mosaic Approach

The Mosaic approach helps researchers to include the child's perspective in the research. It is a way to triangulate and listen to perspectives from different stakeholders. In this study data from parents, teachers and children make up the findings. This part of the findings was gathered from the six-week intervention and taken from classroom documents.

4.41 Children's Voice and Drawings

All children in the Intervention Group classes completed four journal entries with drawings during the six-week implementation phase as this was considered a regular school program, so all children participated during the prescribed time for the curriculum intervention. Of those drawings, four drawing per child from the parents who signed up and were in the Intervention Group were examined. Children were familiar with journals linked to all areas of the curriculum and drew in them regularly. Additionally, teachers had training on scribing children's utterances or voice and listening carefully to the child's comments. Included in the curriculum were instances to prompt the children to draw the following questions.

1. What is mindfulness?
2. How can I be mindful?
3. What is kindness?
4. What can I do to be kind?

Several themes emerged from the drawings which were analysed in two groups, with questions 1 and 2 together and questions 3 and 4 together. In the chart below, I display the themes that emerged for each, along with samples of the children's drawings and the scribed words from their class journals.

Themes of listening, calmness, relaxation and the breath emerged in the drawing about mindfulness. Themes of giving, love, being nice to friends, helping others and sharing emerged in the children's drawings about kindness. There is a discussion

about these themes and how they overlap with the themes from parents' and teachers' interviews later in this chapter. Tables 10 and 11 show examples of the children's drawings and their words related to the drawings. Figure 6 shows a thematic map of children's interview data.

Table 10: Examples of Mindfulness Drawings		
Listening Children noticed that they were listening more attentively. Some children when asked, stated ideas linked to listening and being present with sound. Children noticed that they could hear things they had not noticed before such as the leaves falling, their heartbeats and birds or even the weather. Teachers had noted that children were able to listen more attentively and listed to the mindful bell with attention and care.		
		
I can hear the birds singing.	I am listening to the birds.	I can hear the clouds being windy

Calming Strategies

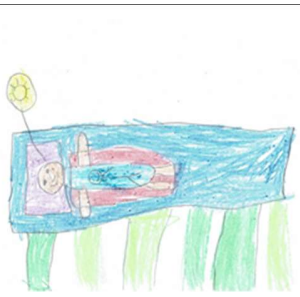
Many children drew themselves feeling calm by focussing on an object. They remembered the glitter jar activity and how the glitter falling helped them feel calm. This theme was closely linked to the theme of relaxation shown later on, however; this theme showed more of an active stance while relaxation was more about being still. Many children described feeling happy in these pictures.

		
I am happy. I am at my house with mummy.	We shake the bottle and our breathing in going slower now. I like this.	I am looking at the glitter bottle.

The Breath

This theme was a strong one, and many children linked mindfulness with the breath. Many children drew the Hoberman sphere, blowing bubbles or noticing their breath when they play.

		
Blowing bubbles…fun	Bubbles it is fun. I like to do breathing.	I like making my breath going in and out

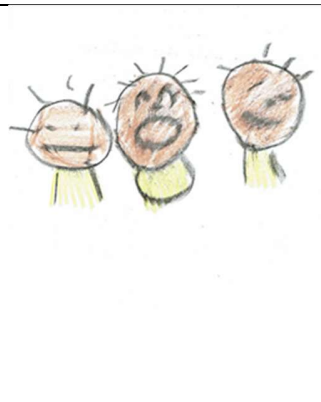
		
This is me with the ball. It goes in and out. I can go in and out with my breathing. (referring to Hoberman sphere)	It is breathing in the flower and out the flower. Like smelling it or lying down and breathing with your hand on your tummy.	We can breathe in more. Even when we are playing.
Relaxation Relaxation was another emergent theme from the children with children mentioning lying down and even writing the word relaxed in one instance. Children showed ideas such as massage, relaxing with others and showing relaxed postures. They spoke about relaxing with others and how it feels to be relaxed. Some children tied breathing into the relaxation excercises.		
		
I feel relaxed about mindful. I can breathe in and out. I feel nice.	It's when you lie down and then you can think and relax like you are in your bed.	I relax with mummy.

Emotions		
The theme of emotions was a strong one and children were able to recognise and say that mindfulness was about feeling happy or feeling happy inside. Happiness was the predominant feeling shown although in the kindness example there were many linked to love.		
		
Because I always play with toys. Mindfulness is happy.	It is when you feel happy inside yourself.	Today I am so happy because I am smelling flowers. That is being mindful.

Table 11: Examples of Kindness Drawings

Being Nice to Friends

Over a quarter of the kindness pictures linked to being nice to friends. Children showed this in various ways such as sharing toys, books, food or stickers and by hugging, playing with or singing with friends.

		
I got a hug.	I am sharing and being nice. I like to share my balloon.	It is when you are kind to your friends.

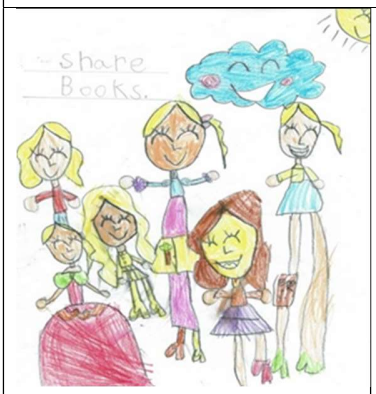
Helping Others

Helping others was also a common theme with helping parents to tidy up, helping friends to feel better, helping the teacher as common concepts. There were also ideas such as helping and caring for others by making them feel better.

		
I clean up the toys.	I helping my father to feel better.	I am drawing a picture for my friend. She is sick. I am drawing her a picture, so she will be better.

Giving

The theme of giving emerged from giving gifts, to giving of your time and sharing with others whether it be books, toys or other objects. Several students noted giving up their seats for elderly on public transport.

		
It is sharing your books with your friends.	I gave my seat in the train to an old man.	I gave a gift to my cousin.

Love

Many of the pictures in kindness and mindfulness featured love or hearts however, more so in the kindness drawings. This expression of love may be linked to the loving-kindness thoughts in the curriculum. Most of the love pictures or pictures with hearts discuss love within a family context.

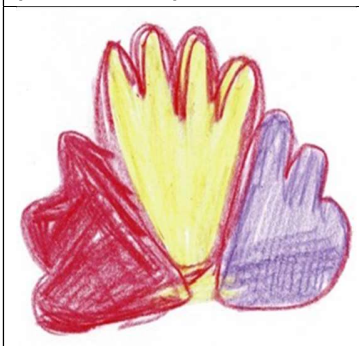
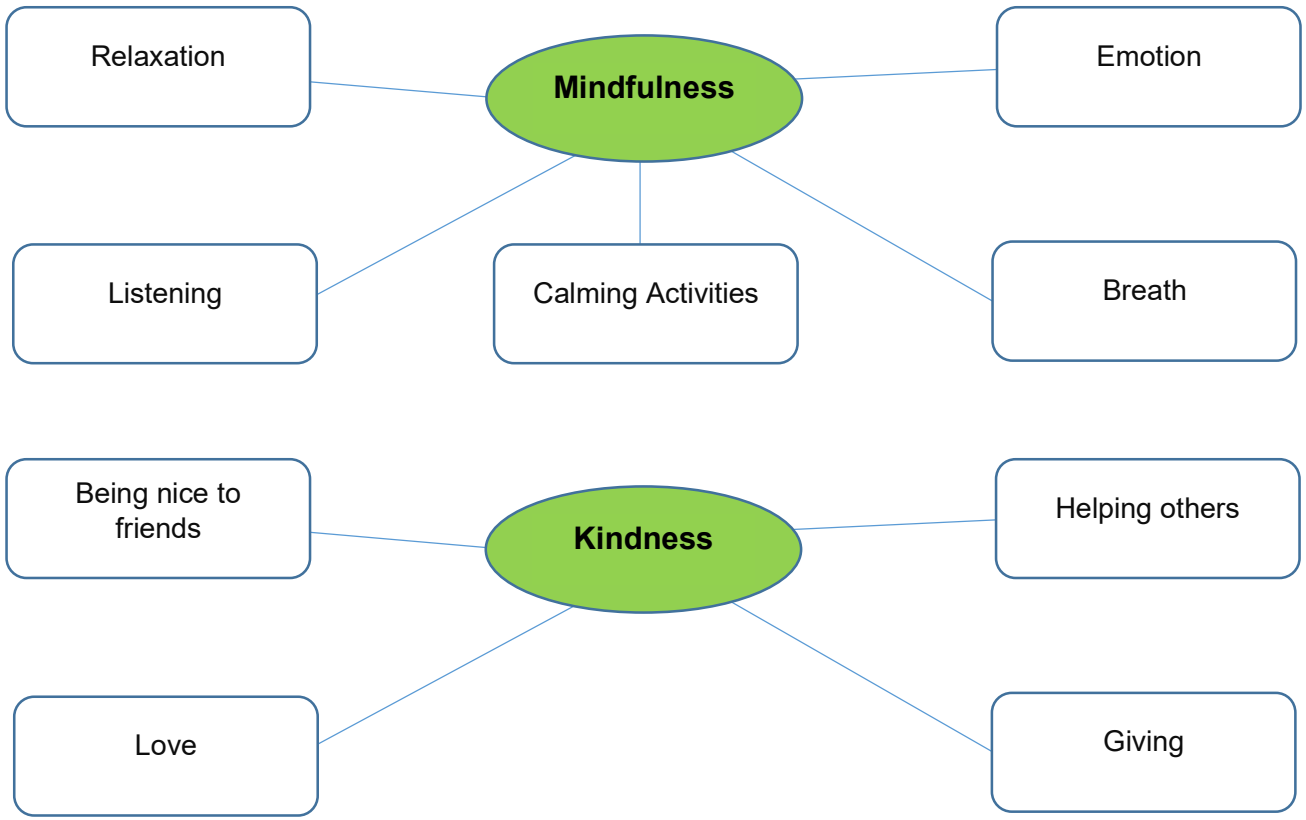
		
It is love. Family is love to each other.	I love mummy. My mummy is kind to me.	I love my sister. We are having a picnic and she is kind to me because she made the food and she said I like you.

Figure 6

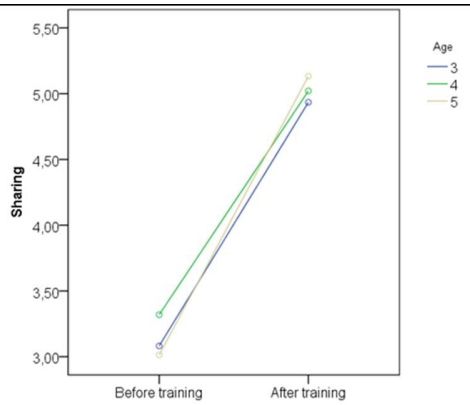
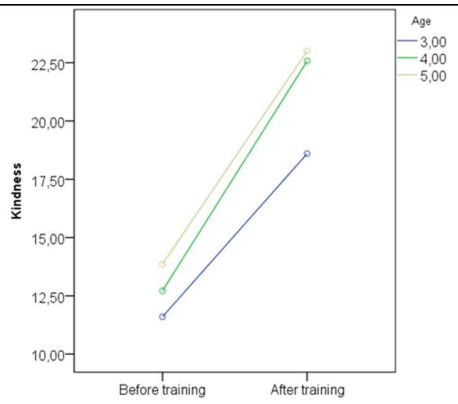
Thematic Map Children's Drawing and Voice: Concepts and Themes



4.42 Classroom Observations and Assessments

Next, I analysed the classroom observations and assessments that were part of the curriculum and so completed during this research from those in the Intervention Group. On the first assessment, which was tracked and kept in the children's portfolios was their awareness of sharing through the sharing game which the teachers played at the start and end of the curriculum. Graph 16 below shows that children had a large increase in the ability to share after the six weeks passed. RM ANOVA showed a significant effect of training on sharing, F=278.72 (p<.001), with higher results after the training, regardless of the age group, F=1.00 (p=.368). Effect size for training was very high (η^2=0.50) (Appendix 13).

Graph 17 shows the children's ability as a class to name acts of kindness, this is a recurrent theme in the curriculum and the graph shows the increase per class in the number of acts of kindness that children were able to name. RM ANOVA showed a significant effect of training on kindness, F=109.63 (p<.001), with higher results after the training, with no interaction of the age group, F=1.20 (p=.322). Effect size for training was very high (η^2=0.84) (Appendix 13).

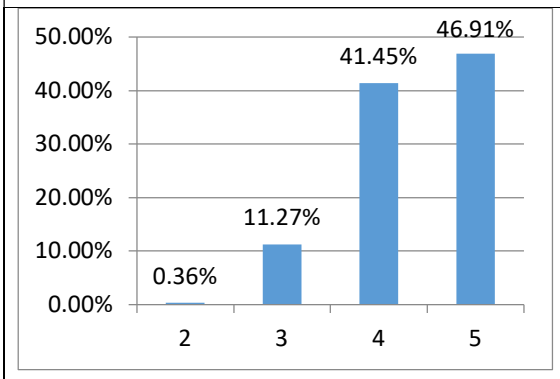
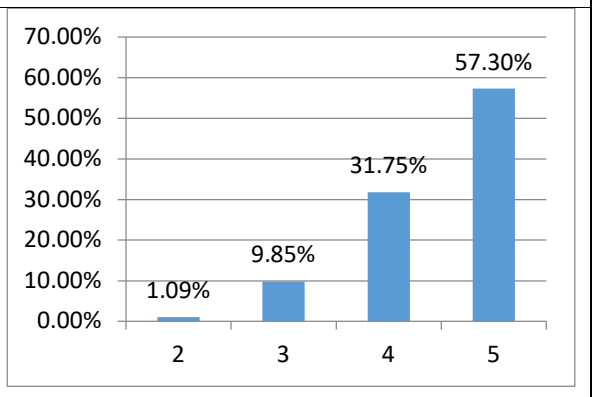
***Graph 16**: Sharing Activity*	***Graph 17**: Kindness Class Activity*
	
Pre and Post-Intervention effect stratified by age for sharing assessment	Pre and Post-Intervention effect stratified by age for kindness assessment

4.5 Parental Post-Intervention Findings

After the intervention, the post-surveys and the post-interviews were conducted. As with the pre-data the parents' data will be displayed first followed by the teachers' data. Following this section, I examine the findings as a whole.

4.51 Parent Post-Intervention Survey Results

All parents from the Intervention Group and the Waitlist Group filled in surveys as I wanted to compare the difference between the two groups pre and post intervention. However, parents in the Waitlist Group were not asked to answer the first two additional questions added to the post-survey (compared with the pre-survey) as these pertained only to those who has completed the intervention. Most parents felt the mindfulness curriculum was beneficial to their child with 46.91% scoring 5, most true and 41.45% scoring four. Many parents indicated they would like their child to have more opportunities to learn mindfulness with 57.30% scoring 5, most true and 31.75% scoring four. No parents noted the lowest indicator of one for either of these questions indicating they are enthusiastic about the possibility of mindfulness in preschool. Graphs 18 and 19 show the results.

Graph 18: *I believe the mindfulness curriculum was beneficial for my child*	***Graph 19****: I would like my child to have more opportunities to learn mindfulness*
	

Pre- and post-data were also analysed together at this phase concerning parents' observations of their child. I analysed data from the 290 (78.6%) parents had

children in the Intervention Group and the remaining 79 (21.4%) were in the Waitlist Group which had not experienced the intervention at this point.

RM ANOVAs results show that pre and post period had a global effect on improving concern for others, F=18.46 (p<.001), self-regulation, F=4.35 (p=.038) and social competence, F=24.49 (p<.001). The interaction between intervention and Intervention Group and Waitlist Group showed significant differences for all subscales, namely concern for others, F=6.36 (p=.012), self-regulation, F=6.36 (p=.012), prosocial behaviour, F=7.64 (p=.006) and social competence, F=15.61 (p<.001). Descriptive statistics show that Intervention Group, the group with the intervention had higher results compared with Waitlist Group who had yet to experience the intervention. Effect sizes were low or moderate. See Appendix 14 for more details.

4.52 How the Initial Post-Survey Results Linked to Development of Parent Post-Intervention Semi-Structured Interview Questions

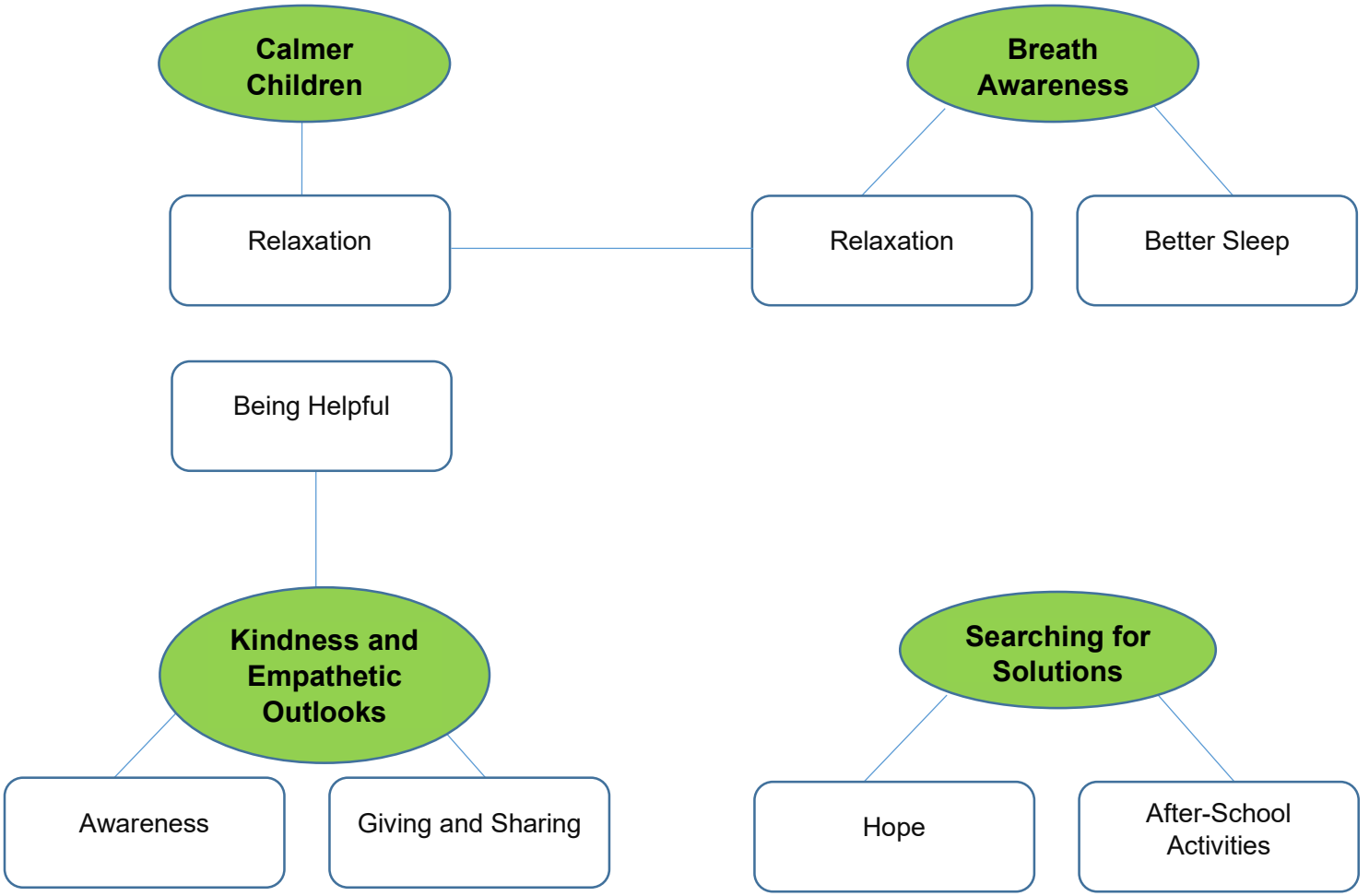
These results led to the development of the post-survey interview questions below in the same way as the parent pre-interviews. Again, the participants in the semi structured interviews were from the Intervention Group and were the same parents present in the pre-intervention focus groups. The areas I was most interested to learn more about were what specifically parents felt was interesting about the curriculum, and if they thought a mindfulness curriculum integrated into the classes next year would be favourable. I also wanted to learn about any changes they might have noticed in their children over the course of the delivery. The questions developed are found in Appendix 10.

4.53 Parent Semi-Structured Interviews in Focus Groups, Post-Intervention

After conducting the parent interviews post-intervention in focus groups, eight concepts emerged with four main themes. The themes were 1) calmer children 2) breath awareness 3) kinder and empathetic outlooks and 4) searching for solutions. A thematic map of the post-intervention themes is shown in Figure 7.

Figure 7

Thematic Map Parent Post-Intervention Interviews: Concepts and Themes



Searching for Solutions

Several concepts emerged in the post-interviews. One was a feeling of hope. Parents indicated that they felt hopeful that the preschools were looking for solutions to help their children become stronger and more resilient, in order to face Hong Kong's educational system in a way that is not as stressful. All of the parents reported they were happy that their child had participated in the mindfulness programme and that they felt the curriculum was too short. It was explained that this was only a short intervention and later the school may put in a year-long programme after considering the impact and other considerations.

Another concept that arose was that of training for both parents and children. Some parents were worried about how much time adding a mindfulness curriculum would take away from the academic programme if implemented on a full year basis. Parents discussed other programmes they were investigating outside of school, including a yoga course. Some parents noted they would like an afterschool option for mindfulness for their children such as Saturday morning classes. Parents were very aware of what other kindergartens were offering. Some parents mentioned other kindergartens were offering Neuro-Linguistic Programming (NLP) training for parents or Primary School Prep courses which include stress reduction elements and wondered if this group of schools would be offering parent training and other courses outside school for the children. A number of parents indicated they started reading about mindfulness on the internet and they think it is vital for their children to learn more mindfulness practices whether in school or in an afterschool course. Parents were interested in developing their own mindfulness practice. Overall there was a feeling of hope, that perhaps there was something to help their children, perhaps too much of a sense of hope as I feel some parents may have come to view that mindfulness was 'the' solution for a complex set of issues. Table 12 gives examples of the concepts and theme 'searching for solutions' from the interviews.

Table 12: Samples of verbatim examples of parents discussing 'searching for solutions'	
Focus Group 1 I think the programme is too short. I want to see this programme for whole year because I saw some small changes in my child, and I think it is helpful.	*Focus Group 4* This was interesting and thank you to Ms. Helen to introduce this to us. I want to have more chance for my son to study this and learn more mindfulness.
Focus Group 2 This curriculum is good for my child and I think he can learn more to manage his feelings and to be focussed. I think it is interesting and I am happy the school will learn about new things and bring it to help the children.	*Focus Group 5* Joyce loved to talk about something in this programme so I think it is good they can relax and also it is enjoyable. My daughter was happy, and she showed me some drawings and talked about how to be kind.
Focus Group 2 I liked to learn about the focus, and it can help to improve the study habits. This is very important so I think it should continue next year. This can be useful as the children need to learn to focus so they can be prepared for primary school.	*Focus Group 6* I think this programme can benefit the students to prepare for the interview for primary school, so it is very good. They can practice being calm and do the breathing work.
Focus Group 4 It has some benefit and can be a good programme to make it longer so the children can learn more and take more time to do this. I also want to do this course because I think it can be good for parents to learn this too.	*Focus Group 7* This can be helpful in long term for our children to know about this and to feel more happy and more focussed. This mindfulness is important to learn when you are young.

Breath Awareness

One concept that emerged was the importance of more awareness about breath. Some parents noted that their children were able to teach them some breathing exercises and they enjoyed the accompanying parenting cards that explained how to help their child at home. Many parents seemed surprised that their child could do this task and showed it had helped them in numerous ways such as calming them down when they felt upset.

Parents also indicated the breathwork was helpful when their child became upset or when a sibling became upset as the child could use breathwork strategies to try to comfort a parent or sibling, especially in the last weeks of the intervention. This awareness in the children, that they could use their breath to calm themselves, was something many parents were interested in.

Another concept that emerged was children getting better sleep. Some parents said they practised breathwork with their child before bed and they seemed to fall asleep more quickly and rest more peacefully. They reported that they enjoyed doing the breathing exercises with the children too and realised how effective this could be in helping children release stress from the day and having a special time together before bed. Table 13 gives examples of the concepts and theme ‘breath awareness’ from the interviews.

Table 13: Samples of verbatim examples of parents discussing 'breath awareness'	
Focus Group 1 My son told me breathe in and out mummy you will feel better. At that time, I realised wow my son can also teach me!	*Focus Group 4* The breathworks was very good. We followed the parent cards to do this and we tried some ideas my daughter learned in class like 'hot chocolate' breathing.
Focus Group 1 I think my daughter was more aware about her breath and deep breathing. 'When she would feel upset, she would say I going to do breathing' since the curriculum started.	*Focus Group 6* When I asked Justin what he did at school he mentioned breathing and said, 'breathing helps us be calm'. We did the parent card of breathing before bed and this helped him sleep better. I think it is nice and can be something to help the children to feel happier and less stressful.
Focus Group 2 I found that my child was telling his sister to breathe when she was upset. He was using his fingers to count his breathing.	*Focus Group 6* One thing I noticed was my daughter was noticing her breathing, like before bed she wanted to do her breathing because her teacher asked everyone if they did this before they went to sleep.
Focus Group 3 I noticed my daughter seems a bit more able to calm herself. She used to get very upset easily but then she was a bit better because she said she would breathe with her fingers. I think it was starfish she said.	*Focus Group 7* My child liked lying on the floor with the animals and breathing. He thought this was fun and a game to keep that on his stomach.

Calmer Children

Many parents indicated their child seemed to be calmer and gave specific examples such as less fighting with a sibling, less temper tantrums and other poor behaviour. Parents noted that they felt it was easier to calm children after they became overexcited by something and that the children seemed to be readily able to calm down when asked.

The children had brought their glitter jars home and several parents mentioned their children enjoying playing with these, using them peacefully and being quite focussed using them. The glitter jars were something parents stated they used at home as well.

Relaxation was a word used often by the parents. Parents reported the parent cards sent home helped then connect with their child with relaxation activities and calming thoughts. Children liked to give their parents a massage or a hug and a favourite activity was hugging themselves.

Parents noted that children were able to practise relaxing and, in many instances, used relaxation in play with their toys. Many parents commented on their children telling siblings or others to relax, calm down, take a breath and other calming words.

Table 14 gives examples of the concepts and theme ‘calmer children’ from the interviews.

Table 14: Samples of verbatim examples of parents discussing 'calmer children'	
Focus Group 1 One area that was very interesting was about the feeling of calm and relaxed. My son liked to play this at home with the stuffed animal and saying I feel calm and relax.	*Focus Group 4* My daughter liked the massage part and she gave me a massage, so I was happy!
Focus Group 2 ….I saw him telling his toys to relax and feel calm.	*Focus Group 5* We liked the card about going to listen to sounds in the park. Joey could be very calm and listen carefully and notice many sounds that we never paid attention before.
Focus Group 3 I think it is easier to get ready for bedtime now with the parent cards and especially about being calm.	*Focus Group 6* One thing I think was the jar with those sparkles is interesting. I saw my daughter playing with this for long time. She can pay attention to it and seems it is good to help her feel calm.
Focus Group 4 Jeremy said let's pass the smile around at our family gathering. It was very funny. He told us everyone will feel happy if we share our smiles.	*Focus Group 6* I did not notice very big changes, but I did see that Lilly is a bit more able to calm herself down than before. I think she would notice more that she is starting to get upset and will draw or play with her toys more calmly.

Kindness at Home and in Society

Many parents noticed an increase in their child noticing acts of kindness or being aware of kindness both at home and outside the home. They were very keen to tell their parents about the kindness they saw or experienced, as well as the kindness they bestowed on others. Children, according the parents seemed very excited to share these ideas. Several parents mentioned their children would be searching for kind acts because they wanted to put them on the kindness tree at school and tell their teachers about the kindness they saw. The kindness leaf activity that was carried out at home was well received and parents liked this idea. Parents were very keen to share the examples of kindness their child offered including helping their family members, offering to carry a bag and opening doors, for example.

Parents also noted there was an awareness in their children of how being kind was something to strive for and that kindness would be more readily seen if they were kind to others first. They also noted that children used words such as be kind, be nice and other comforting words more often.

Sharing and giving came through strongly as a concept. Parents noted their child was more willing to share toys with siblings or family members and children were in fact, offering to share without being asked. After the children had participated in a giving activity at school, giving a toy to a less fortunate person, they wanted to keep to giving items away and be generous with others.

Table 15 gives examples of the concepts and theme ‘kindness at home and in society’ from the interviews

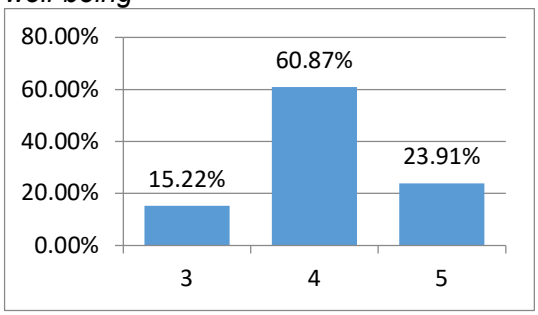
Table 15: Samples of verbatim examples of parents discussing 'kindness at home and in society'	
Focus Group 1 My daughter is always pointing out when someone is kind now. I was amazed she can think of so many kind things everywhere.	*Focus Group 4* One thing I did notice a change was my daughter is trying to be more kind and uses the word kind a lot. For example, when we went to see her grandmother, she was pointing out all the kind things like Rebecca is kind because she made the tea for grandmother. I think it is good for children to know these things and to be more kind.
Focus Group 1 My son helped me to choose a gift for his friend. He said he is being kind. I did see him trying to be more kind.	*Focus Group 6* My son used his smile to be more kind. He talked about passing the smile. He also shared his toys more with his brother than before.
Focus Group 2 I think that I can see more concern about the others. For example, we went to Hong Kong side and a lady fell over and my son said we need to help that lady.	*Focus Group 6* The kindness leaves were very nice. I like these ideas and my son liked to write so many things on the leaf. I think it is good now he is trying to find kind things when we are going out or at home.
Focus Group 3 I think the most change I saw was about being kind. My daughter tried to help with her baby sister. She wanted to help to pick her clothes and to give her water.	*Focus Group 7* For me I didn't see much change except about helping others, I think she can say who is helpful and not helpful more clearly now.

4.6 Teacher Post-Intervention Findings

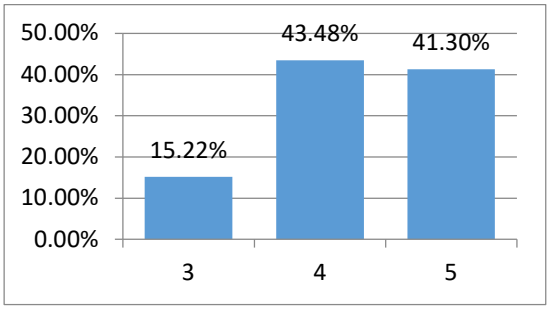
4.61 Teacher Post-Intervention Survey Results

These surveys were given to both Intervention Group teachers and Waitlist Teachers; however, there were two questions that Waitlist Teachers did not have to answer since they had not participated in the curriculum intervention yet. Data post-intervention showed that most teachers felt the training helped their students as shown on Graph 20, with 84.78% of teachers strongly agreeing with this premise by scoring a 4 or 5. In Graph 21 one can see that 84.78% of teachers felt their class became more focussed during the intervention and most showed more kindness as on Graph 22. While 73.33% of teachers felt their students could relax more easily scoring a 4 or 5, as shown on Graph 23.

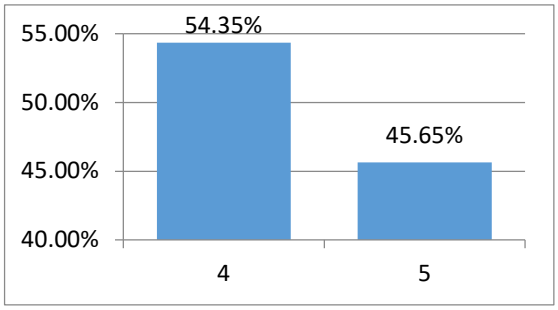
Graph 20: *I believe that mindfulness training helped my students improve their well-being*



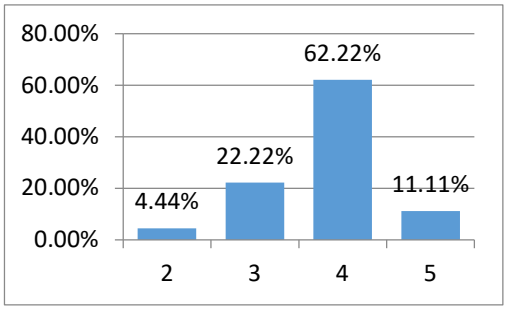
Graph 21*: I believe my class became more focussed*



Graph 22*: I believe my class showed more kindness*



Graph 23*: I believe my students were more able to relax*



Teachers in the Intervention Group which ran the curriculum first noticed increases in all five areas analysed- focus, emotional literacy, prosocial behaviour, relaxation and kindness. Teachers unanimously wanted to implement the curriculum at the school due to the benefits they witnessed with the children they worked with.

I analysed pre- and post-intervention data from 62 teachers; 47 (75.8%) that were in the Intervention Group and the other 15 (24.2%) from the Waitlist Group I analysed the following questions: 'What percentage of your class currently show mindfulness characteristics?', 'What percentage of your class currently show kindness towards others?', 'What percentage of your class currently focus well on activities such as circle time or small group time?' and 'What percentage of your class can manage their emotions well?'. RM ANOVAs results show that training had a global effect on improving concern on all of the dimensions, namely Mindfulness, $F=81.07$ ($p<.001$), Kindness, $F=48.43$ ($p<.001$), Focus, $F=9.53$ ($p=.003$) and Emotions, $F=30.42$ ($p<.001$). There was a significant increase of student's percentage in all of these dimensions. The interaction between the Intervention Group and Waitlist Group showed significant differences for Kindness, $F=18.03$ ($p<.001$) and Focus, $F=12.30$ ($p<.001$). For these dimensions, Intervention Group had higher results indicating the intervention made some difference. Significant results had high effect sizes (>0.08). However, both mindfulness and emotional management were found to have no significance and showed no or low effects indicating that these areas may not have resulted in a change in the students. Details of these analyses are in Appendix 15.

4.62 How the Initial Post-Survey Results Linked to the Development of Teacher Semi-Structured Interview Questions

These results led to the development of the post-survey interview questions below in the same way as the parent pre-interviews. The areas I was most interested to learn more about were what specifically teachers felt was compelling about the curriculum, the ease of delivery and what components were either easy or challenging to implement. I also wanted to learn about any changes they might have

noticed in the students throughout the delivery. The questions developed are found in Appendix 11. Only teachers in the Intervention Group took place in the last focus groups as it was geared to discussing the changes they had noticed after the curriculum implementation.

4.63 Teacher Semi-Structured Interviews in Focus Groups, Post-Intervention

After conducting the teacher interviews post-intervention in focus groups, nine concepts emerged with four main themes. The themes were 1) calmer classrooms 2) focussed attention 3) kinder outlooks, 4) mindfulness development. A thematic map of teachers' post-interview data is in Figure 8.

Calmer Classrooms

Several concepts emerged in discussions with teachers. One interesting note was that many teachers indicated that they felt calmer while teaching the curriculum which then helped students to also be calmer. Some teachers said that their classroom was not calmer, but they personally were calmer and less reactive. They felt a sense of acceptance and peace that made their teaching experience less stressful, a kind of mindful awareness. Teachers also said they felt closer to their students, with one teacher noting that she had learned about a traumatic event in a child's family that she had not been aware of before, and she felt that these activities had made her more aware of the issues children were experiencing in her classroom.

Teachers also gave other examples of feeling more mindfully aware, for example, they felt that they could let stressful feelings pass more easily and be less judgmental with parents and school administrators. They also noted that the practice of loving-kindness helped to make teachers realise that all parties wanted what was best for children and perhaps the methods each selected were different due to the pressures on each.

Another concept that the interviews with teachers revealed was breathwork. Teachers noted the children enjoyed the breathwork activities very much and would

independently use them in the mindfulness corner or at their desks. Teacher's mentored and modelled breathwork in the activities enabling children to then use the strategies independently, aligning with the work of Vygotsky in helping children to develop using the ZPD. Several teachers also observed other children helping a child who was upset telling them to breathe in and out. Teachers noted that particularly towards the end of the intervention, when students had much experience with the activities, they noted a calmer classroom, particularly after playtime or activities when the children were overexcited. Table 16 gives examples of the concepts and theme 'calmer classrooms' from the interviews.

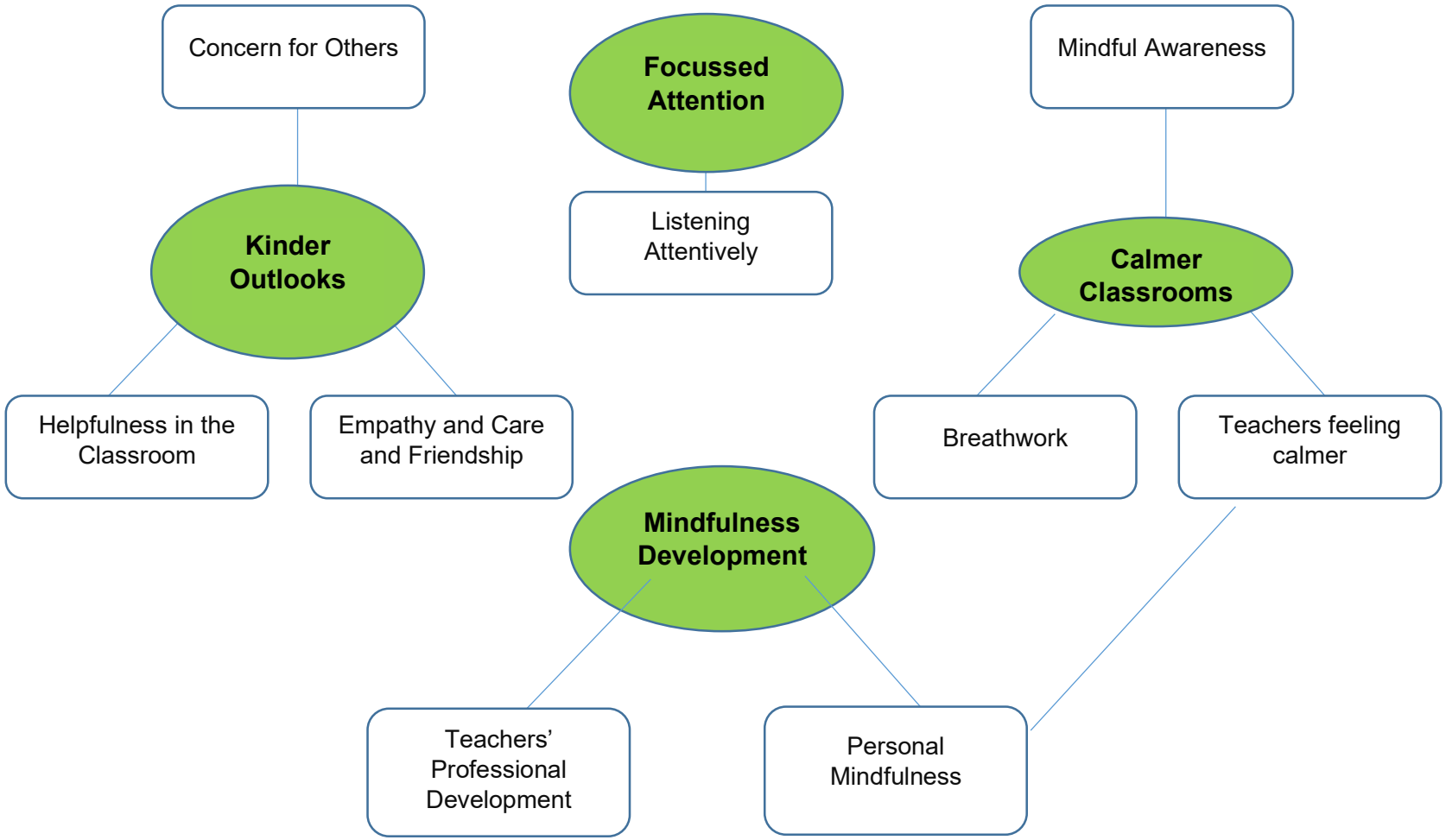
Table 16: Samples of verbatim examples of teachers discussing 'calmer classrooms'

Focus Group 7 My classroom is just much calmer. The mindfulness corner is a great addition, having that quiet place for students to go has been wonderful. I love the calming kits as well; the students grab these and use them independently.	*Focus Group 4* This was so good, after so much rushing it was nice to be able to feel a sense of calmness with my students. It was like a bonding experience because we had that time to just be.
Focus Group 1 I think this actually helped me as a teacher more than I saw anything in the kids. I liked the breathwork as this helped the children and myself slow down a bit.	*Focus Group 6* I think especially after break and like when we were walking to the bathroom and stuff it was quite interesting because the kids were really calmer.
Focus Group 2 I did the course Ms. Helen recommended us to do and this was very interesting and made me feel calmer in the classroom. Also, this seemed to reflect in the kids so it was just generally calmer!	*Focus Group 6* I think the mindfulness corner is nice and the kids love it and actually I think this whole new curriculum has made the whole class calmer, even me.

Focus Group 5 I noticed I felt a lot closer to my students. A kind of compassion took over, instead of feeling stressed out or annoyed, I would really think about why my student is acting in a certain way. This really brought me closer to the class.	*Focus Group 7* I never thought about my breath or how my stress could affect my students, so I loved the tips about being mindful ourselves, that made me calmer and more able to be present with my students.
Focus Group 3 My students were a bit more relaxed I think, but also so was I.	*Focus Group 1* It was funny because I felt calmer!

Figure 8

Thematic Map Teacher Post-Intervention Interviews: Concepts and Themes



More Focussed Attention

Many teachers felt their students were slightly more focussed or could understand what is meant when they asked them to be focussed. They pointed to examples of children noticing the birds singing on the trees outside the school with one teacher saying the student said, 'they weren't there before but now we are listening the birds are coming'.

Teachers generally stated the children liked the focus activities such as finding their apple in a pile of apples, and they had fun and started to pay attention and notice details. Many teachers noticed children were better able to listen and follow instructions when they, for example, sat in their mindful bodies or were asked specifically to listen mindfully.

Table 17 gives examples of the concepts and theme 'more focussed attention' from the interviews.

Table 17: Examples of verbatim examples of teachers discussing 'more focussed attention'	
Focus Group 1 I think the best part was about focusing. I thought my kids were good at this before, but they can really notice things more than before and stay on task longer	*Focus Group 4* My students are more able to be in control of their actions and emotions. They can focus without being as easily distracted now that they are aware of what it means to pay attention and to notice.
Focus Group 1 I didn't see that much change, but I think one thing is the kids pay more attention to what's going on around them now.	*Focus Group 6* The focus activities were helpful. Like the glitter jar, lots of kids use this to calm down but also to focus and they liked the apple thing- they were so intent on finding their apples and I think these types of things are good for kids to improve their focus.

Focus Group 2 The mindful listening was really good, and I think the kids really listen with more focus now.	*Focus Group 7* Well for me the most noticeable thing was my students noticing and focusing, when we did the listening circle, we could see the children finding new things each time.
Focus Group 3 I think the children could listen more carefully. The mindful bell activity every day was good practice for that and children were very happy to try to listen carefully and then this was easy to bring into other parts of the class when asking children to listen to instructions or a story.	*Focus Group 7* I noticed that my class was able to focus a bit longer on lessons. They were already mindful in their play and focussed but I noticed that when we read stories and did activities that were a bit longer they could focus longer before getting distracted.

Kinder Outlooks

One concept that emerged was that of deeper friendships and more care within friendships. Children would ask where absent children were, and if they were okay, and they liked to make get well cards and small gifts for sick friends in the class. Teachers stated children more readily played with other children, and called them friends, especially in the upper classes.

Teachers also noticed a sharp increase in concern for others, for example, if someone fell or was crying, several children would try to help comfort the child and would alert the teacher. Teachers indicated that children's empathy seemed to increase during the intervention, and it was easier for them to think about others, for example, when sharing a toy. They liked to share their smiles and give hugs to children who appeared to be suffering.

Another concept that appeared was children being more helpful in the classroom. After learning about being kind and being helpful children were very eager to help to tidy up and to help other children. Teacher's noticed children would more readily just do something helpful without expecting acknowledgement for doing it.

Teachers reported the kindness tree was extremely popular, but almost became a competition to see who could have the most leaves which detracted from the experience. Teachers noted parents were very interested in what was happening and what activities they did that day so they could practise at home. Table 18 gives examples of the concepts and theme 'kinder outlooks' from the interviews

Table 18: Examples of verbatim examples of teachers discussing 'kinder outlooks'	
Focus Group 1 My students were more caring. I noticed children going over and hugging another child or saying Miss William is sad.	*Focus Group 4* It was really interesting when we did the sticker exercises because I think the kids learned a lot about sharing in the curriculum were more able to share.
Focus Group 1 I think the kids learned to be more concerned about their classmates. Now when anyone is absent the kids ask if whoever it is sick, and they want to send the good wishes.	*Focus Group 6* I liked all the storybooks and how they helped the kids learn to be kind and to help others, I could see my kids were always pointing out when someone did something kind. Also, the tree, it was fun seeing it grow as a teacher and I think the kids also loved it.
Focus Group 2 One thing I saw was the kids comforting each other when something went wrong. It was cute.	*Focus Group 7* Kindness was a big one for me, I could see the kids definitely have more awareness about being kind and can point it out.
Focus Group 3 One day my students came running over saying two kids were fighting, but a Focus Group of other kids were able to help them solve it on their own which was interesting. I think they really picked up on some of the things about helping others and also thinking about other feelings during this curriculum because it was very explicit, the activities were really helpful.	*Focus Group 7* The children loved the kindness leaves, but it was almost distracting, kids would point out every little thing and want a leaf. I had to make a time at the ending circle time and otherwise it would take over. The parents loved this too and we got a lot of leaves throughout. It was a good experience though and my kids can name so many things, I think it is just like an awareness they have now.

Teachers' Mindfulness Development

Teachers indicated they required more professional development to understand the curriculum further and to develop their mindfulness practice. Over 60% of the teachers would like to continue to develop their mindfulness practice and could see how this could help classrooms to develop into more mindful places. Teachers noted that they had used various methods to develop their practice including using apps, completing online courses, reading related books and self-study using audio and video guidance. Teachers' reported that the schools had offered to pay for online courses for them and they were pleased with this.

Some teachers noted that the start of mindfulness practice had helped them personally and in their home lives. Several teachers expressed surprise at how quickly they noticed a change within themselves, less reactivity, with just a few weeks of daily practice. Several teachers in each school seemed to be very moved by the effect mindfulness had on themselves, and this may lead to them becoming mindfulness leaders within school contexts. Table 19 gives examples of the concepts and theme 'teachers' mindfulness development' from the interviews.

Teachers spoke of the ease of implementing the curriculum into their classroom. Most teachers were highly positive about it and indicated they were able to integrate key activities into other experiences, like replacing another art activity with something from the curriculum or reading related stories. They liked the 15-minute slot but some of the 3-year-old teachers noted that 10-minutes was long enough. They liked the way the mindfulness curriculum increases the time allotted for mindful breathing and other practices, as the children develop their skills, and that everything was quick and included a lot of movement. They reported the ease of implementation was high.

When teachers offered that certain parts of the curriculum had the most impact, nearly all teachers indicated the breath awareness activities and the kindness tree. They noted that the lessons or activities linked to these areas were effective. Also, the teachers enjoyed mindful eating. They had said snack time was always a rush and children gulped their food down and this just slowed events down and made the

children look at their food and snacks with more appreciation and they were more able to savour and enjoy their food.

Table 19: Examples of verbatim examples of parents discussing 'teachers' mindfulness development'	
Focus Group 1 I think that we need more training if we are going to do this for the whole year, but I can see the potential in it.	*Focus Group 4* I hope we do more PD On mindfulness and social-emotional learning and also behaviour management.
Focus Group 1 I would like more PD in mindfulness so I can share more ideas with the kids.	*Focus Group 6* I think the training was good and it would be good if we can have more training about this.
Focus Group 2 I think in Hong Kong this is a great thing to add in and it would be good if we can get some more books and courses for the teachers too.	*Focus Group 7* I started to use the Head Space app you showed us and its really helpful. I am reading the Frantic World book too which is good, but it would be good if you can give us more training about this especially about the transitions and mindful moments because that is the time we can change things.
Focus Group 3 I am really interested in this. Are we going to have more training on it?	*Focus Group 7* I hope we can develop this more; I think it was good how we shared with each other and could get more ideas.
Focus Group 4 I think this training helped my classroom to become a more calmer and more relaxed place for both myself and the children.	

A few teachers found that it was hard to remember at the beginning to complete the mindful moments, but teachers who started practising themselves seemed more able to do these simple tasks, probably due to their embodiment of mindfulness.

4.7 Triangulated Analysis and Synthesis

When analysing the findings as a whole, I discovered several areas where they overlapped. The quantitative data supported the qualitative data in several ways. First, the results from the surveys were used to develop initial questions to delve deeper into the personal stories and meanings during the interviews. Additionally, the data were used to triangulate the statements made during the parent and teacher interviews and the children's drawings and voice, by examining whether the pre- and post-survey data showed the same changes, if any, in children's dispositions.

Stress

The joint acknowledgement of the stress levels of parents and teachers of Hong Kong preschool children and the reasons behind the same were one area of agreement. During the pre-intervention phase parents were highly charged and anxious about the state of Hong Kong Education. They feared they were trapped in a system with no escape. Several parents became emotional stating that if they did not enrol their children in multiple activities and push them to learn more, they would not be accepted in a suitable primary school. Many parents explained their anxiety about their child's education but tried not to let their child know. During the pre-intervention phase, teachers also acknowledged that there was a high-stress level in students in Hong Kong schools and even in some of their youngest students. There was some pressure on both parents and teachers who were caught in a charged situation and were actively looking for solutions to improve the well-being of Hong Kong children. Teachers also raised concerns about finding the time to implement the curriculum fully, due to the tight schedule. However, they were hopeful that such a programme could help children who were feeling anxious and stressed due to their overscheduled days and the pressure to perform well at school. Quantitative data supported the qualitative data, with parents and teachers indicating that Hong Kong was a stressful place for students compared to their Western counterparts.

Breathwork

Children's voice and drawings overlapped in several areas, with the findings from post-interviews of parents and teachers. Children drew pictures and spoke about breathwork showing many of the activities linked to breathwork from the curriculum such as blowing bubbles, starfish breathing or glitter jar breathing, for example. Teachers also indicated that breathwork was enjoyable and helpful for the students. Teachers also reported that this was their preferred activity in the classroom, and they were surprised at how easily the children picked up breathwork. Teachers themselves found deep breathing to be helpful. Parents too noted that breathwork was something that children shared at home and they saw the children experimenting with it outside school. For instance, one parent noted that her child had tried to offer her sibling (who was upset) a way to use the breath to calm down.

Calmness and Relaxation

Teachers and parents both noted an increase in calmness, with teachers feeling calmer and parents finding it being easier for their child to self-calm. Cross-analysis of parents' quantitative and qualitative data also indicated some improvement in children's ability to self- calm and be more regulated. Relaxation was one of the results that produced similar findings with all the three stakeholders. While children attributed mindfulness to be relaxed or experiencing something relaxing such as a massage or lying down with their eyes closed, parents noted that their child seemed more relaxed especially at bedtime and several parents found their child able to sleep more restfully.

Focus

Cross-analysis of quantitative and qualitative data from parents and teachers indicated an improvement in children's focus; however, this was not entirely consistent. Parents noted that children could focus more readily, although they did not notice major differences in the interview data. A significant difference was noted in the survey data, which showed a low effect. On the other hand, the teachers' survey data showed significantly high effect in response to children becoming more focussed. Another data point from children's drawings found that children could appreciate that listening was part of mindfulness. They drew images showing their ability to pay attention and hear sounds more readily. Teachers also acknowledged this in dialogue, commenting on the improvement of children's attention spans and focus on certain activities.

Kindness

Cross-analysis of quantitative and qualitative data from children, parents and teachers indicated an improvement in children's kindness and pro-social behaviours. Children could readily discuss and draw various aspects of kindness such as giving, sharing and helping others. Parents noted more pro-social behaviour and concern for others in their children. Parents also reported children being able to notice acts of kindness and trying to be kinder at home and outside the home and noted their children were very engaged with the kindness activities and the home-school kindness leaf activity. Indeed, parent survey data also corroborated this finding, showing significance with the Intervention Group with low effects in both kindness and concern for others. Concurring, Teachers noted that the children were readily able to express kind acts and became more compassionate. Pre- and post-quantitative teacher data showed an improvement in kindness with significance and high effect. The children's classroom assessments yielded a positive result in both kindness and sharing with high effects. This finding was highly triangulated and showed positive outcomes from all parties.

Curriculum Implementation

Parents and teachers felt that the programme should be in place year-round in the following school year. However, there was some disagreement among teachers as to what was the ideal length of the lessons, with most teachers indicating that if the programme was year-round, they would prefer only one weekly 15-minute and one 30-minute session with mindful moments taking the focus and integrating the programme more into other areas of the curriculum. Some teachers of 3-year-old children felt the 15-minute sessions to be too long for some of the lessons, and that 10 minutes would be adequate.

Teachers also suggested a whole school mindful moment on the school intercom at the start and end of the day, which is currently used to discuss the day, weather and sing the welcome songs. Some parents were more concerned about how the programme might disrupt academic learning time, but others felt it was beneficial and were highly supportive of its continuing in the way the school thought best.

There was also agreement on the initial feeling of hopelessness regarding change, and then hope that a mindfulness curriculum may be beneficial. Overlapping areas of evidence with children's voice and drawings, children's classroom assessments, survey results and interview data of parents and teachers led to these triangulated findings.

4.71 Possible Issues with the Study

During the study there were a few minor issues, one teacher left on long-term sick leave and a new teacher came into the classroom; however, since there were two teachers in the classroom, I used only the data from the teacher that remained. Another concern was the difference in the teachers' knowledge of scribing children's words. There is a high turnover of Native English-speaking teachers in the schools as is common in these types of settings. Therefore 36 teachers had experienced scribing for over two years, while for others this was the first year. The fact that they

had just started this practice may have resulted in varying levels of documents evidenced.

Another possible issue is that some of the dispositions measured may overlap, as discussed in Chapter 2. For example, being attentive and self-regulation may overlap to some degree; however, it was decided that since this are both cornerstones in relation to benefits found in other mindfulness studies with young children, they would both be included.

4.8 Conclusion

An analysis of qualitative and quantitative data results showed a variety of interesting findings that could be useful for preschools in Hong Kong and potentially worldwide. The triangulated analysis and synthesis of data showed many benefits. One area of benefit was improved pro-social behaviour, particularly empathy, kindness and concern for others. Focus was another area, where small improvements appeared after triangulation of the data, although there were some discrepancies between the scale of change seen by parents and teachers and also between the qualitative and quantitative data in this case. No significant changes were seen in children's emotional management, although a few anecdotal stories emerged supporting development in this area, and children's drawings showed them capable of expressing their emotions well. Survey data also did not find any significant improvement in children's mindfulness according to teachers, but in an anomaly in interviews, these data were very clearly supportive of changes in mindfulness. This anomaly may have been due to the wording of mindfulness, whereas in interviews, teachers and parents discussed aspects such as noticing, awareness and breath. Parents and teachers believed that the curriculum was beneficial and would like to have it implemented as a full year programme in the school, on a reduced timetable. Children appeared to like the activities and teachers felt they were age-appropriate and engaging. Ease of implementation was found to be high.

Chapter 5: Discussion, Conclusions and Recommendations

5.1 Introduction

The connections to the literature review and the methodology chapter to deliver the conclusions of the research questions are detailed in this chapter. First, I discussed the pertinent findings linked to the research questions concerning the literature. Next, I included a discussion of the possible issues or limitations of this research. Then, I discussed the contributions the thesis makes to the field before presenting the conclusions of the research. Next, I made suggestions for future researchers to develop and study in this field. Finally, I provided my recommendations and final comment.

5.2 Discussion of Significant Findings Concerning the Research Questions and the Literature

This research resulted in several findings of note. An in-depth analysis and explanation of the implications of the mindfulness intervention and the perceived views of parents, teachers and children resulted in a number of interesting findings which I review below. The mixed methods approach and the Mosaic approach allowed me to expand the breadth and depth of the exploration into mindfulness and preschool children.

5.21 Research Questions

The questions I was investigating were:

1- How does mindfulness facilitate the development of children's well-being dispositions in a Hong Kong international preschool context?

2- What are the perceptions of teachers and parents in a Hong Kong international preschool context relating to mindfulness and its influences on children's well-being dispositions?

3- How do preschool students in a Hong Kong international preschool context perceive the ideas of mindfulness and kindness?

5.22 The Findings with Discussion and Links to the Literature

Overall, there were several areas found to be beneficial in helping children to develop their well-being dispositions after completing the six-week mindfulness curriculum. This section has eight relevant findings that are discussed in conjunction with the literature to further support the arguments.

The data from these findings come from the cross-examination of the pre and post-survey data of parents and teachers, the pre and post-interviews of parents, the two classroom measures, the children's drawings and their own words scribed by the teacher, alongside the teachers' observations.

The intersection of these data formed an interesting result, which indicates that mindfulness can be a beneficial addition to preschool classrooms. The findings are discussed together, as there are many overlapping areas in answering the questions and in order not to be repetitive, I decided to answer them as a whole.

The first two findings intersect and are therefore discussed together.

Finding 1 – Children may feel increased calmness and relaxation after completing a preschool mindfulness curriculum

Finding 2- Teachers may feel calmer and experience calmer classrooms as a result of a preschool mindfulness curriculum

Increased calmness and relaxation are discussed together as they are intricately linked. This research found that children were calmer in the classroom and teachers

themselves felt calmer as they practised the mindfulness lessons with their students. This finding is in alignment with several studies including that from Adair and Bhaskaran (2010) which showed increased calmness in preschool children, although that study used yoga, as the only mindfulness practice. Liehr and Diaz (2010) also came to a similar conclusion showing an MBI with older children could produce calmer children. It is interesting to think about how different curricula offering different practices might reflect in the different outcomes for students, but also that ones with such different practices could ultimately result in a similar finding. Additional studies reported that mindfulness brings about increased relaxation (Weare 2013) and this was also noted by parents and teachers both of whom indicated that children could relax more easily. Parents noted children could sleep more easily due to being more relaxed as in studies by Campion and Rocco (2009), which agrees with findings in studies such as Wall (2005).

The reflection that teachers felt calmer links to the research of Goodman and Kaiser-Greenland (2009), showing that teachers and students can develop their mindfulness practice together and leads to the premise that embodied mindfulness is key to children benefiting from mindfulness in the classroom. Moreover, teachers showed much higher levels of practice, after the intervention, as reported by the teacher interviews. Many indicated that they had started small practices such as five-minute meditations using apps, using their breath more effectively, and had an awareness of mindfulness in their daily teaching practice that seemed to help them be personally more mindful which led to calmer classroom environments. Again, if one examines Bronfenbrenner's ecological systems model, one might see how the microsystem and the mesosystem are interlinked and how the immediate environments might change if relaxation or calmness are integrated into classrooms. In fact, this agrees with research (Goodman and Kaiser-Greenland, 2009) showing that a calmer parent or teacher enables children to be calmer too.

One area on which this research builds is the minimal previous research on mindfulness and early childhood (Flook et al., 2015; Zelazo and Lyons, 2012; Zelazo et al., 2018). Although there are several studies relating to the inclusion of

children's perceptions of mindfulness with older children, there are none that relate to young children. Children noted several themes that interestingly overlapped with teachers, parents, and the research in the field. Through their drawings, children readily expressed that mindfulness links to both calmness and relaxation. This finding is interesting as it shows that children can recognise common aspects of mindfulness from even a short exposure to a mindfulness curriculum when they are directly and indirectly taught strategies to feel calmer and more relaxed.

Another area that this research expanded on, is that it included both parent and teacher perceptions. Recent studies show that mindfulness interventions may enjoy a stronger influence on children when combined with parental training (Neville et al., 2013). Although this intervention did not include parental training, there were parent-activity-cards sent home, and parents were integral to the research, as the main adults in their children's lives. Parents were highly supportive of the project.

As I discussed earlier, this study is essential in the Hong Kong context as young children are experiencing increased stress, and older children do not have tools to help them cope with stress and anxiety resulting in high levels of thoughts or attempts at suicide in the student population as discussed by Yip et al. (2004). Parents and teachers agreed that the stress and anxiety Hong Kong's preschoolers experience is due to the entrance interviews to enter kindergarten as discussed by Rao et al. (2003), the overscheduling of activities, primary school entrance interviews and the expectations of learning many topics at a young age to cope with Year 1 of primary school. This finding builds on the research by Pearson and Rao (2006) and Rao and Koong (2000) by adding additional perceptions to the reasons behind preschool anxiety and stress.

These findings could also be linked to the Bronfenbrenner Ecological Systems Theory if one thinks about the broader issues in Hong Kong society in the macrosystem such the norms related to the overscheduling of children or increasing suicide rates in children, for example. These factors may improve with systems in place working within the different levels of society to improve relaxation and calmness for example workplace stress reduction. One might also relate it directly to

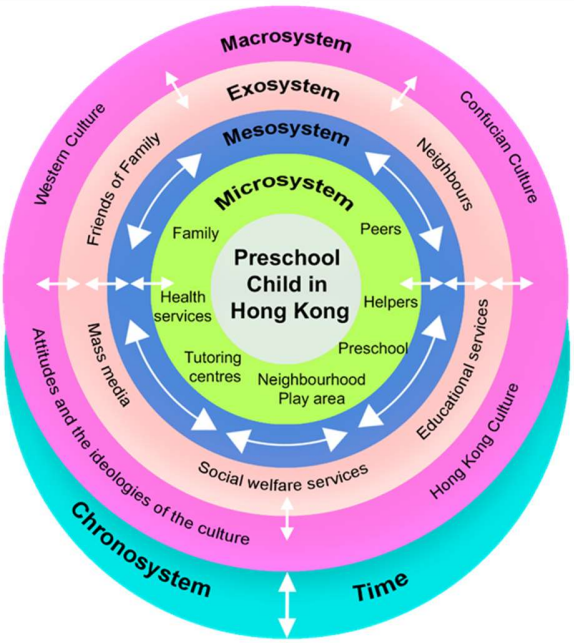
the microsystem since one knows from research that parental and teacher calmness and relaxation directly impacts children's levels in these areas. One can also consider how the macrosystem, and how that affects Hong Kong's children indirectly. For example, the policies and concerns of the Hong Kong Education Department, and the culture itself, with its competitive drive for primary school entrance heavily influences the lives of Hong Kong's young children every day. Also, one can see how the macrosystem plays a large role in determining social issues such as the cultural expectations of what young children should be learning and doing both at home and school. Next, I would like to share a Bronfenbrenner's ecological systems model in the Hong Kong context of this study and synthesise how researchers might use it to reflect on the child at the centre. Figure 9 shows how the ecological systems theory may influence Hong Kong preschoolers.

Finding 3- Children experienced an increase in prosocial behaviour when exposed to a six-week mindfulness curriculum

The mindfulness curriculum was found to be beneficial to children's prosocial behaviours including showing concern for others and being kind. Many data points triangulated this finding although, to be clear, the quantitative data can only be assumed to be an inferential link.

Both parents and teachers in the Intervention Groups reported in survey results, that they noticed children exhibiting more prosocial behaviours in their home and school life after completing the curriculum intervention. Extensive examples were given in the interviews from the Intervention Group such as children sharing more readily, comforting their peers, noting and feeling concern when peers were absent from class and similar ideas.

Figure 9: Preschool Child in Hong Kong Ecological Systems Model



Exosystem is the external environment that indirectly affects the child. In this case, that would include the education department's rules and regulations for preschools, primary schools and competitive pressures of external events the school participates in such as speech festival competitions.

Macrosystem is the wider cultural context. In Hong Kong, this would include the mix of Western and Confucian beliefs, the beliefs of what preschool education is supposed to do and what that looks like for children.

Chronosystem is about time, such as the moment to moment connections in a preschool or between family members as well as the passage of time from birth to preschool and then to primary and beyond. Bronfenbrenner also discusses the development of dispositions over time.

The Preschool Child in Hong Kong is at the centre of our model

Microsystem is the immediate environment, in this case, the child's family, helpers, preschool, and tutoring centres, for example, that child is directly involved with regularly. All these factors are crucial in the child's development and could drastically influence the levels of stress in the child.

Mesosystem are the connections between the immediate environments. Important in this context is the relationship between the parents and the preschool, the parents and the tutoring centres, the helper and the child for example. These relationships will help to determine the support or pressure a child feels. Another important point here is the transition to primary school.

Model Adapted from Hayes, O'Toole and Halpenny (2017)

Findings on prosocial behaviour were interesting when comparing Intervention Group and Waitlist Group as these indicated that the Intervention Group students had beneficial changes. Also, aspects that related to concern for others was significant with low effect as reported by the parents in the Intervention Group when comparing the pre and post groups. Teachers' survey data also showed significant improvements in the area of improved kindness with a high effect in the Intervention Group

Classroom assessments also found that all classes in the Intervention Group, exhibited a significant increase in recognition of acts of kindness from the beginning to the end of the intervention with high effect, indicating that the children were embracing the lessons and could discuss and exemplify what they were learning. Additionally, the sharing assessment conducted also showed a significant change in the children's willingness to share during the intervention with high effect. Of course, I cannot attribute this solely to the MBI as I do not know how the students in the Waitlist Group would fare in such an assessment, but it is likely that the direct teaching of the dispositions to be kind, to be caring and to be empathic resulted in such growth in the students learning in this area.

The data from this study builds on the findings by Flook et al. (2015), who also noted more prosocial behaviour in young children after completing a kindness curriculum. This finding also links to the work of Wolf (2000) about specific practices that are beneficial for young children concerning developing kindness and peace in the classroom by corroborating that those practices produce the stated effects. Others such as Black and Fernando (2014) also found improved prosocial behaviour but with children in lower elementary school.

Again, by including the voice of the children and their work, I have built on previous research by validating it and adding several new dimensions, where one can see how the children perceived this area. Children were very adept at exemplifying and developing their disposition of being kind. They were able to portray and display kindness through their drawings and voice and could clearly indicate what kindness looks like drawing specific examples, from inside and outside school and home,

such as giving up a seat on the train or sharing their toys. They developed themes in their work including giving, sharing, helping others and love.

Finding 4- Preschool children can increase their disposition to be attentive and focussed after a 6-week mindfulness intervention

While the findings on focus and attention were also positive with some teachers indicating that children had longer attention spans during the study, some teachers reported in interviews that they only saw a small difference in this area. However, the survey data showed there was significance with a high effect between the pre and post Intervention Groups. Several parents in the Intervention Group could note improvements in their child's ability to focus or be more attentive in the interviews and pre- and post-survey data noted a significant improvement with low effect. This finding is contradictory as in the research, for example, that done by Lim and Qu (2017) stated that no change was found in attentional skills while others, such as Adair and Bhaskaran (2010) and Garg et al. (2013), noted the children experienced increased focus and concentration. Again, this may be due to specific lessons within the interventions, the length of time and other factors and one must also consider that the quantitative data is only indicative and an inferential link.

All of the adults with both the Intervention and Waitlist Groups in this study reported that increasing the focus of children would be a useful idea in preschool. The disposition of being attentive would be highly useful for teachers and parents to enhance learning in all areas to maximise the child's ability to be present with their work and reduce anxiety. This finding is in line with the work of Johnson et al. (2011).

Finding 5 Inconclusive evidence was found that self-regulation improved as a result of the preschool mindfulness intervention

In their interviews, teachers and parents noted several improvements in children's self-regulation during this study and parents' survey data analysis noted a significant change with low effect in this area. However, teachers' survey data found no significance and no effect in the area of emotional management, which has some links to self-regulation. Although the findings on self-regulation were weaker than those of attention this may be due to the fact that self-regulation consists of a much broader area than only attention as discussed in Chapter 2.

Interview data was mixed in this area with a few parents and teachers commenting on improvements, but no consensus, therefore, little triangulation of the data is possible. This finding is in contradiction to that of Garg et al. (2013), who did note a substantial increase in self- regulation among students, though their study focussed on elementary-aged children rather than preschoolers. Razza, Bergen-Cico, and Raymond (2015) also found an improvement in self-regulation but not in focussed attention, which contradicts this study somewhat, as the opposite was found with strong improvements noted in children's ability to focus. This contradiction may be because they focussed on yoga as a mindfulness activity, while the curriculum in this study focussed more on kindness, awareness and relaxation. Regarding the children's evidence, they were able to draw and label emotions more readily, perhaps indicating they are moving towards more fluid emotional regulation or at least higher levels of emotional literacy.

Finding 6 Children showed some improvement in emotional literacy and expression during the preschool mindfulness intervention

Although not as clear as the finding of greater kindness and calmness, there was some evidence that children benefited in the sphere of emotional literacy education. Although teachers' survey data did not show strong results in emotional management interview data was more positive. After analysing the interview

evidence, it included many mentions of children managing to calm down themselves or their peers using the breath or simply by being more compassionate with their language. Children produced somewhat stronger evidence with their pictures depicting love and hearts and other pictures where children name and identify emotions such as happiness and sadness and, in some cases, how to change a sad feeling to a happier one. This ability to notice and name emotions is very pleasing to an educator and would be a first step for students to become more mindful and accepting their feelings.

If one refers to the ecological systems model one might think about how the microsystem of the child, that is their preschool, their parents, helpers and others in their immediate life model emotional literacy as research shows that children often mirror the adults in their life (Goodman and Kaiser-Greenland, 2009). One might also consider the macrosystem and perhaps how Chinese culture often does not appreciate the use of emotional language as discussed in Chapter 2 (Bond, 1993), and how that perhaps contributes to the mixed results in this area.

Finding 7 -Breathwork is an important component of a preschool mindfulness curriculum

Teachers and parents both spoke about their children displaying awareness of breathwork in their interviews and the children did so in their drawings and words, so this is an integral part of the mindfulness curriculum. Besides, Goodman and Kaiser-Greenland (2009, p.425) stated that breath awareness is a tremendously valuable practice of mindfulness.

Teachers observed that the most beneficial lessons were those related to breathwork and kindness. They stated that children were highly engaged in those activities and could internalise and learn very quickly in these areas, while parents found their children using this skill at home and enjoying sharing it with family members. Parents also enjoyed the home-school link, with the parent cards provided to practice breathwork at home.

The children also noted breathwork as being important in mindfulness and discussed several breathwork activities they had done in the class in their drawings. This finding was interesting as it is quite an abstract concept, although the curriculum offered ways to make this more concrete. However, it links with the research of Vygotsky on ZPD, as when a teacher who has embodied mindfulness, demonstrates to a student how to use the breath effectively, then the student internalises that learning and can then do so independently. Perhaps as an adult was modelling the breathwork and making the concept external by discussing it in words and using a variety of ways to notice the breath, children could develop the skill of noticing their own breath. This breath awareness could support the other findings discussed above such as being calm and relaxed, and even prosocial behaviour as children noticed their breath patterns and changed their reactions based on these observations to kinder, more caring responses.

Interestingly teachers' survey data showed no significance or effect on the question 'What percentage of your class currently show mindfulness characteristics?' when applied with the intervention group, although the breathwork is an integral part of being mindful. This may be because of the teacher's not associating specific concepts such as breathwork directly to mindfulness characteristics in a child although they spoke about becoming more mindful themselves.

***Finding 8*- Mindfulness is perceived by teachers and parents as one possible solution to help young children develop skills to decrease stress and anxiety**

Aspects of this finding ties in with the Bronfenbrenner's Ecological Systems model discussed in Chapter 2. It shows how the macrosystem, that is the wider cultural context where norms such as high academic expectations are found, and the exosystem, that is, for example, the pressures associated with primary school admission, could be related to wider societal issues such as the increases in child suicide and increasing stress levels in young children.

The shared experience in social groups often aids in feeling less isolated when we are suffering (Germer and Neff, 2013) and parents and teachers seemed united, as if on a joint mission to solve a problem in these discussions. What is of note is that although experiences of parents and teachers are different in many aspects of this study, there were also many overlapping areas, especially a mutual feeling of taking action to help young children.

Before the intervention parents and teachers alike agreed that children's well-being should be a top priority in preschools and that mindfulness could be a helpful construct. However, some parents were concerned about the impact on other academic areas of development while teachers worried about fitting it into the curriculum, with all the other initiatives the schools had in place. This discussion is in alignment with the research from Yuen and Grieshaber (2009) and Fung and Lam (2012) who described Hong Kong parent's drive to ensure their children access academic curricula from a young age. Although post-intervention, most stakeholders agreed that there was a benefit to including this curriculum and many were interested to see what a longer-term programme would look like and how it might be of benefit, teachers and parents demonstrated conflict about the specific ways to improve children's well-being.

Teachers emphasised they would include much more time for this learning in preschool classrooms and remove the many academic aspects in their preschools such as bookwork. Parents, on the other hand, wondered how this could be added into the curriculum without any academic time being lost, for instance, by offering more afterschool clubs or extending school hours. This arrangement will be an issue to discuss and agree upon with the school's directors and then to engage parents in educational programmes highlighting how children learn best and how perhaps some of the academic pressures may not be in children's best interest as described by Schweinhart and Weikart (1997) and Marcon (1999).

Other Findings of Interest to This Discussion

Teachers noted that the curriculum was easy to implement due to the easy to read and implement lessons and the resources provided which teachers felt they could implement without a great deal of extra preparation. Teachers of 3-year-olds indicated that some of the lessons would be better suited to be shorter and so this could be a consideration for future planning. In Hong Kong there is not a free flow in preschools and lesson time is strictly regulated by the Ministry of Education. Teachers are obliged, for example, have a 30- minute music lesson or physical, snack and bathroom breaks at specific times. This structure does not lend to the natural flow of activities seen in many Western preschools. Teachers of one school, which has a 15-minute shorter length in daily timing, reported that it was challenging to fit in the longer activities due to the shorter timing and requirements of other academic work. Therefore, I feel it is important that teachers intentionally select those parts of the curriculum that will work best within their classroom to make it a more enjoyable and educationally effective environment.

5.3 Possible Issues with the Findings

The findings in this study are to be considered carefully and viewed as exploratory. The quantitative data should be viewed as inferential and not causal. Further studies are needed to explore the findings. For example, it is unknown if the children's perceived stress is due to the education system or the stress felt by parents and teachers to prepare students for the upcoming primary schooling. Future research could investigate this aspect of Hong Kong preschools children's microsystem, macrosystem and exosystem and what is causing the evidenced stress.

As Goodman and Kaiser-Greenland (2009, p.424) noted, 'there is a learning curve. Mindfulness takes practice; insight and compassion are experiences that cannot be forced'. Concurring, Segal et al. (2002), suggested that regular practice is required to maintain the benefits of mindfulness and hence longitudinal studies would be

beneficial. The curriculum was six-weeks long and further research to determine how long the effects on the intervention could last be useful.

Data about the amount of home practice was not collected, although several parents discussed practising at home with their child. Home practice could significantly affect the study, and in the future, I would recommend accounting for this with the survey questions to gain an idea of the amount of time parents spent practising. This recommendation is in line with Huppert and Johnson (2010), who indicated that home study has significant implications.

Parents may have been biased when reporting findings as Hong Kong is highly competitive. The principals of the schools explained that in their experience parents would like their child to be a shining example. This desire for a child to be viewed as exemplary may have affected their responses, especially in the interview portion where other parents were there together.

An additional point to reflect on in this study is whether the placebo effect could have influenced the responses of the participants. Although every effort was made to remain impartial participants may have had positive expectations of the curriculum that could have influenced their responses. It would be difficult to control for these in this study since participants themselves may not be aware of these biases within themselves.

As I was not able to be in Hong Kong for the whole timeframe of the study due to costs, the post-interviews were conducted through Skype. This different interview setting may have affected the results, as being face-to-face and onscreen are quite different experiences. I found it was more challenging to manage the group onscreen than in person.

As a single researcher, I had to limit the study to the amount I felt I could manage and budget. Therefore, although there were many other options for analysis, I decided to focus on those I felt most important and perhaps come back to the others at a later date.

The current sample consists of nearly exclusively native Hong Kong Chinese parents; thus, the findings may have limited applicability to a more diverse sample outside of Hong Kong International Preschools. As an educator working across many different countries, I note many similarities with other Asian preschool settings, and other competitive settings such as areas of the USA and the UK. Therefore, this study may apply to other places where young children also experience stressful education situations.

Another issue concerns the discussion raised in Chapter 2 about the overlap in some of the dispositions explored. Research is not decisive on the exact definitions of attention, self-regulation, emotional competence, prosocial behaviour with various researchers defining different aspects as more or less important, as discussed in Chapter 2. How they overlap and intertwine could be an issue with this study. Since these were measured separately there is the possibility, they may have skewed the results. In addition, one survey question overlaps slightly as in both the self-regulation and social competence measures ask about the child's ability to control tantrums which could have also slightly skewed those results.

The discrepancy between the findings of inconclusive improvements in self-regulation and the teachers noting no effect on emotional management may be due to the perceptions of the teachers regarding what preschool aged children should be able to do developmentally at that age (regarding emotional management) due to the macrosystems in Hong Kong. The fact that there was strong evidence detailing emotional literacy in both the interviews and the children's own work may mean the teacher's did not link the concepts together and need more training in this area or that there was an issue with understanding the survey question.

Additionally, as nearly all the teachers knew me, they may have felt some social pressure to participate or feel they would be viewed as uncooperative if they refrained. I made every effort to make sure that the participants knew that participation was entirely voluntary.

Consequently, these factors are to be considered when applying the findings from this study. Despite these limitations, I believe there is a large pool of useful data to

develop further research from and to explore further aspects on mindfulness with preschoolers.

5.4 Contributions to the Field

This research study has contributed to the field in several ways. Firstly, it has built on the minimal early childhood research in this area and expanded on the research of others (Flook et al., 2015) who explored EF, academic improvements and prosocial behaviours through a different lens. In this study, I examined how childhood dispositions linked to well-being might develop through mindfulness, something not discussed in the current literature.

As noted by Ager, Albrecht and Cohen (2015), most mindfulness research does not consider the voice of the child, and I found no studies that attempted to do so with preschoolers. No other mindfulness research with children under 5 years old was found that included the child's voice and perceptions, so this study is unique in this respect and adds an important perspective. This new concept in preschool mindfulness research adds to this area of qualitative research and can help to determine what parts of the curriculum are most absorbed, enjoyed and useful for young children.

One area where this research will be especially helpful is in Hong Kong preschools, where no current research linked with mindfulness or well-being dispositions is available. It is a much-needed area of discussion to help combat the low levels of student well-being. This research opens the door for discussions and exploration about how mindfulness may help young students cope with the stress of schooling in Hong Kong and other countries with similarly high-pressure stakes; however, as the results are indicative findings and I cannot presume to indicate broader findings with this study.

Research that examined parents' perceptions of mindfulness in a preschool setting was also limited and this study, by including the voice, observations, and opinions of

the parents, led to a triangulated outcome that found there was agreement from many data points and with three groups: teachers, children and parents.

In studying the ecological system model, this study might also promote further research and discussion into broad societal concerns such as suicide, high academic pressure, primary entrance and overscheduling. These concerns require more research into whether specific community outreach, school education or individual classes can provide solutions. Researchers need to examine all levels of the ecological systems and note where changes may be useful and explore how to best integrate those changes to support a child's healthy development.

This study would also be of interest and helpful to other early year educators and researchers globally, in reflecting on what mindfulness looks like with children ages 5 years and under, and how one might learn from the perceptions of the different stakeholders in our schools.

5.5 Research Conclusions

The results of this research noted that a mindfulness curriculum is a beneficial intervention for helping preschool students in a Hong Kong context to develop positive well-being dispositions. These dispositions included being kind, focussed, caring, calm and relaxed. According to the stakeholders, including parents, children and teachers, children experienced improvements in the development of various dispositions and well-being factors.

Overlapping areas of positive data between all three parties include being calm, being relaxed, expressing kindness, sharing and showing positive emotional expression. Parents and teachers also described the MBI as aiding with stress and anxiety reduction, improving empathy and compassion, and increasing focus and the ability to be attentive.

This research concludes that a mindfulness curriculum may be a useful tool to introduce into Hong Kong preschools. Teachers' embodiment of mindfulness to develop positive dispositions in children is an important step. Teacher's professional development may consider discussing Vygotsky's ZPD and how teachers might use this approach may further children's learning in this area. Although this MBI is exploratory, as Harnett and Dawe (2012) showed, there is no foreseeable harm in introducing such practices and I believe they could be beneficial in societies experiencing high stress among students.

Teachers found the curriculum easy to implement and children seemed to find it enjoyable in learning the intended skills. Children's voice and drawings also indicated that they could understand and absorb the information.

Teachers who practised more mindfulness themselves, felt the curriculum had more pronounced effects than those who did not. This links back to the research from Singh et al. (2013), who noted that teachers who practised mindfulness themselves noticed benefits in their students.

A six-week mindfulness intervention can lead to small improvements in children well-being dispositions such as, being kind, attentive, and self-regulating one's emotions. Mindfulness may be best introduced in the preschool environment with a combination of moment to moment awareness alongside short, playful lessons and integrated into the curriculum through art, language and literacy, physical play, snack time or meals and other areas.

Improving the well-being of young students is of interest to the schools' leadership as Hong Kong society has a highly competitive nature of schooling, starting with preschools. Many parents voiced an interest in social-emotional outcomes for their children, and teachers noted this as a top priority in their work with students.

Before implementing a mindfulness curriculum in schools, encouraging teachers to develop their mindfulness practice and skills is important, as it appears to be reflected in the outcomes of the children's classes. A teacher who embodies mindfulness will be able to share that outlook with their students.

Educators would benefit from focussing on how they can include children in the exploration of mindfulness and what they think and like or dislike about the process as Lam et al., (2015) did. Additionally, as Ager, Albrecht and Cohen (2015) stated, the inclusion of children's voice in mindfulness research is beneficial.

The findings showed that well-being dispositions in young children might benefit from the incorporation of mindfulness in the daily programme through teacher embodied mindfulness as mentioned by Goodman and Kaiser-Greenland (2009) and through activities designed to align with a child-centred curriculum that links the child with others and the natural world as Wolf (2000) mentioned. This research has practical realities for future researchers when examining what the best way to improve well-being dispositions in young children may be.

5.6 Suggestions for Future Research

There are a variety of areas for future researchers to examine. Mindfulness and well-being are growing fields but are only at the beginning of exploring some areas of mindfulness, well-being or dispositions in-depth and examining their interconnections.

One area where more research is needed is to see how mindfulness programs may impact children from diverse family backgrounds including examining financial, cultural and familial diversity. While this study was in Hong Kong with mostly Hong Kong Chinese children and parents, and a mix of Hong Kong Chinese and Western teachers, some studies mentioned in the literature looked at low-income children. However, there is little research that explicitly questions the cultural, financial or related aspects of the macrosystem that the child lives in and how that might influence results.

Research in the preschool age range is minimal at the moment, and what does exist focuses on a limited area of study. Therefore, more studies examining how mindfulness influences children's play and other interactions in the early years'

classroom are essential. Educators know young children learn very differently from older children and so research exploring the best teaching methods with young children is needed. Further research is needed in the early years using mindfulness in the classroom to determine how these skills might help children to develop their dispositions in other areas linked to mindfulness, such as curiosity,

Longitudinal studies that cover time periods over a year, or several years, may produce more robust data and could examine what parts of the curriculum are most effective and how long the benefits in the various studies last. Furthermore, how the learning environment affects mindfulness in the early years' classroom would be an interesting area of research, especially with younger children. Since educators know the environment is crucial to the learner experience, researching how the classroom environments affect mindfulness practice would be interesting as there is current research on the overstimulation in some classrooms due to many decorations and other items.

Bernay et al. (2016), note that researchers of mindfulness-based interventions stated the need for larger-scale studies using quantitative data and including a randomised controlled design. However, I do not agree that all research needs to be RCT with large quantitative data sets, as I believe that those studies that use a variety of different methodologies are likely to find many conclusions that could prove helpful when triangulated.

Another area of future research is the impact of teachers' mindfulness practice on their students and their classrooms. It would be fascinating to see how teachers with no training, training alongside the students and those pre-trained in MBSR or other methods differ.

Also, there appears to be a lack of exploratory and qualitative research available to understand the different effects and applications of mindfulness techniques for children, although this is building in the primary and secondary age range.

5.7 Recommendations

I recommend that the preschools in this study implement a year-round mindfulness curriculum and measure the benefits, to see which intervention-shorter or longer- is more effective. This evaluation would then form the basis for a programme that supports and aids young preschoolers in developing stress relief and improved well-being dispositions that will be beneficial for their mental health.
I would encourage other preschools in Hong Kong and worldwide, to implement the six-week mindfulness programme and see what results they obtain to compare and contrast with this study, and hopefully see the same benefits that this study provided Hong Kong children in these seven preschools.

I would encourage schools to help teachers to develop their own mindfulness practice either before or alongside their work with children. By embodying a mindful teaching stance, teachers will be more able to embed the essence of mindfulness into young children's daily lives. Additionally, there are many potential benefits for reducing teacher's stress levels which may in turn help student anxiety decrease.

I would encourage preschools to work with parents to run collaborative training and information sessions to enable parents to become more mindful while helping their child to learn the disposition of being mindful. Due to the mesosystem where school and parents intersect, schools supporting parents with mindfulness practice may be crucial in effective outcomes, particularly with young children. Researchers know that concurrent or co-participation programmes in clinical studies with parents have evidence of interaction effects (Burke, 2010). Therefore, by working together and integrating all the systems in a child's life, the child will be more able to engage in learning and benefit from the mentoring of the adults in his or her life. This consistency between home and school is crucial in ensuring the success of new programmes.

I would encourage educators and parents in Hong Kong to continue to discuss with the education department ways to help young children with stress and anxiety, and to create more communication and transition between preschool and primary schools, including perhaps using mindfulness strategies as part of the solution.

5.8 Final Thought

It is my hope that as researchers we can work to find a solution to help students in Hong Kong and worldwide who are experiencing well-documented increased levels of stress and anxiety to learn to flourish. Even young children are experiencing mental health issues and it is crucial that educators, parents and researchers find solutions to these issues very quickly, so that the situation does not worsen. One such solution may be to incorporate mindfulness training in preschools, to help students develop a toolbox of strategies for managing their stress and anxiety and cultivate lifelong skills and dispositions that will naturally embed in their minds and bodies. It is my impassioned hope that this research is continued, and together, we can find the best and most effective ways to help young children to thrive at school and in life.

References

Adair, J.K. and Bhaskaran, L., 2010. Practices from an urban preschool in Bangalore, India. *YC Young Children*, 65(6), pp.48-52.

Ager, K., Albrecht, N.J. and Cohen, M., 2015. Mindfulness in schools research project: Exploring students' perspectives of mindfulness. *Psychology*, 6(7), pp.896-914.

Aguilar-Pardo, D., Martínez-Arias, R. and Colmenares, F., 2013. The role of inhibition in young children's altruistic behavior. *Cognitive Processing*, 14(3), pp.301-307.

Albrecht, N.J., 2016. Connection of a different kind: Teachers teaching mindfulness with children. *Waikato Journal of Education*, 21(1), pp.133-147.

Albrecht, N.J., 2018. Responsibility for nurturing a child's well-being: Teachers teaching mindfulness with children. *Asia-Pacific Journal of Teacher Education,* pp.1-21.

Albrecht, P., Albrecht, N. and Cohen, M., 2012. Mindfully teaching in the classroom: A literature review. *Australian Journal of Teacher Education*, 37(12), pp.1-14.

Albrecht, N.J. and Veall, A., 2014. Wellness: A conceptual framework for mindfulness research and practice. *Proceedings of the Fourth International Conference on Health, Wellness and Society*, 14-15 March 2014, Vancouver. Vancouver: University of British Columbia, pp.1-19.

Anxiety and Depression Association of America, n.d. *Facts and statistics* [Online]. Silver Spring: Anxiety and Depression Association of America. Available from: https://adaa.org/about-adaa/press-room/facts-statistics [Accessed 20 January 2017].

Ashdown, D.M. and Bernard, M.E., 2012. Can explicit instruction in social and emotional learning skills benefit the social-emotional development, well-being, and academic achievement of young children? *Early Childhood Education Journal*, 39(6), pp.397-405.

Association for Mindfulness in Education, n.d. *Mindfulness in education: the foundation for teaching and learning* [Online]. Menlo Park: Association for Mindfulness in Education. Available from: http://www.mindfuleducation.org/ [Accessed 29 March 2018].

Auerbach, C. and Silverstein, L.B., 2003. *Qualitative data: An introduction to coding and analysis*. New York: NYU Press.

Australian Government Department of Education, Employment and Workplace Relations, 2009. *Belonging, Being & Becoming - The Early Years Learning Framework for Australia*. Australia: Australian Government Department of Education, Employment and Workplace Relations.

Ayres, A. with assistance from Robbins, J., 2005. *Sensory integration and the child: understanding hidden sensory challenges.* CA: Pediatric Therapy Network.

Baer, R.A., 2003. Mindfulness training as a clinical intervention: a conceptual and empirical review. *Clinical Psychology: Science and Practice*, 10(2), pp.125-143.

Baer, R.A., Smith, G.T., Hopkins, J., Krietemeyer, J. and Toney, L., 2006. Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13(1), pp.27-45.

Barbour, R.S., 1999. The case for combining qualitative and quantitative approaches in health services research. *Journal of Health Services Research and Policy*, 4(1), pp.39-43.

Begoray, D. and Banister, E., 2012. Reflexivity. In: A. Mills, G. Durepos and E. Wiebe, eds. *Encyclopedia of case study research.* Thousand Oaks, CA: Sage Publications, pp.788-790.

Bernard, M.E., Stephanou, A. and Urbach, D., 2007. *ASG student social and emotional health report*. Oakleigh: Australian Scholarships Group Friendly Society Limited.

Bernay, R., Graham, E., Devcich, D.A., Rix, G. and Rubie-Davies, C.M., 2016. Pause, breathe, smile: A mixed-methods study of student well-being following participation in an eight-week, locally developed mindfulness program in three New Zealand schools. *Advances in School Mental Health Promotion*, 9(2), pp.90-106.

Bertram, T. and Pascal, C., 2002. What counts in early learning. In: O.N. Saracho and B. Spodek, eds. *Contemporary perspectives in early childhood curriculum*. Greenwich: Information Age, pp.241-256.

Bierman, K.L., Domitrovich, C.L., Nix, R.L., Gest, S.D., Welsh, J.A., Greenberg, M.T., Blair, C., Nelson, K.E. and Gill. S., 2008. Promoting academic and social-emotional school readiness: The Head Start REDI program. *Child Development*, 79(6), pp.1802-1817.

Binfet, J.T., 2016. Kindness at school: What children's drawings reveal about themselves, their teachers, and their learning communities. *Journal of Childhood Studies*, 41(2), pp.29-42.

Bishop, M., Lau, S., Shapiro, L., Carlson, N.D., Anderson, J., Carmody, Z., Abbey, V., Speca, M., Velting, D. and Devins, G., 2004. Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), pp.230-241.

Black, D.S., 2016. Mindfulness training for children and adolescents: A state-of-the-science review. In K.W. Brown, J.D. Creswell and R.M. Ryan, eds. *Handbook of mindfulness: Theory, research, and practice.* New York, NY: Guilford, pp.283.310.

Black, D.S. and Fernando, R., 2014. Mindfulness training and classroom behavior among lower-income and ethnic minority elementary school children. *Journal of Child and Family Studies*, 23(7), pp.1242-1246.

Blaikie, N., 2007. *Approaches to social enquiry: Advancing knowledge*. Cambridge: Polity.

Blair, C. and Diamond, A., 2008. Biological processes in prevention and intervention: Promotion of self-regulation and the prevention of early school failure. *Development and Psychopathology*, 20(3), pp.899-911.

Bluth, K., Campo, R.A., Pruteanu-Malinici, S., Reams, A., Mullarkey, M. and Broderick, P.C., 2015. A school-based mindfulness pilot study for ethnically-diverse at-risk adolescents. *Mindfulness*, 7(1), pp.70-104.

Bodrova, E. and Leong, D., 2005. Self-Regulation: A Foundation for Early Learning. *Principal*. 85, pp.30-36.

Bodrova, E. and Leong, D., 2015. Developing Self-Regulation in Kindergarten Can We Keep All the Crickets in the Basket? *Young Children*, 63, pp.56-58.

Bodrova, E., Leong, D. J. and Akhutina, T.V., 2011. When everything new is well-forgotten old: Vygotsky/Luria insights in the development of executive functions. In: R. M. Lerner, J. V. Lerner, E. P. Bowers, S. Lewin-Bizan, S. Gestsdottir, and J.B. Urban. eds. *Thriving in childhood and adolescence: The role of self-regulation processes*. *New Directions for Child and Adolescent Development*, 133, pp.11–28.

Bolte, A., Goschke, T. and Kuhl, J., 2003. Emotion and intuition: Effects of positive and negative mood on implicit judgments of semantic coherence. *Psychological science*, 14(5), pp.416-421.

Bond, M., 1993. Emotions and their expression in Chinese culture. *Journal of Nonverbal Behavior*. 17, pp.245-262.

Boyatzis, R.E., 1998. *Transforming qualitative information: Thematic analysis and code development*. CA: Sage Publications.

Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), pp.77-101.

Bredekamp, S. and Copple, C., eds, 1997. *Developmentally appropriate practice in early childhood programs*. Washington, DC: National Association for the Education of Young Children.

British Educational Research Association, 2011. *Ethical Guidelines for Educational Research* [Online]. London: BERA. Available from: https://www.bera.ac.uk/researchers-resources/publications/ethical-guidelines-for-educational-research-2011 [Accessed 29 March 2018].

Britten, N. and Fisher, B., 1993. Qualitative research and general practice. *British Journal of General Practice*, 43(372), pp.270-271.

Bronfenbrenner, U., 1994. Ecological models of human development. *Readings on the development of children*, 2(1), pp.37-43.

Brooks, M., 2009. Drawing, visualisation and young children's exploration of 'big ideas'. *International Journal of Science Education*, 31(3), pp.319-341.

Brown, K.W. and Ryan, R.M., 2003. The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), pp.822-848.

Brown, K.W., Ryan, R.M. and Creswell, J.D., 2007. Mindfulness: Theoretical foundations and evidence for its salutary effects. *Psychological Inquiry*, 18, pp.211-237.

Brownell, C.A., Svetlova, M. and Nichols, C., 2009. To share or not to share: When do toddlers respond to another's needs? *Infancy,* 14(1), pp.117-130.

Bubela, D. and Gaylord, S., 2014. A comparison of preschoolers' motor abilities before and after a 6-week yoga program. *Journal of Yoga and Physical Therapy*, 4(2), pp.1-4.

Buchanan, A. and Hudson, B.L., eds, 2000. *Promoting children's emotional well-being: Messages from research*. Oxford: Oxford University Press.

Burke, C.A., 2010. Mindfulness-based approaches with children and adolescents: A preliminary review of current research in an emergent field. *Journal of Child Family Studies,* 19(2), pp.133-144.

Burke Draucker, C., Martsolf, D.S. and Poole, C., 2009. Developing distress protocols for research on sensitive topics. *Archives of Psychiatric Nursing*, 23(5), pp. 343–350.

Bryman, A., 2008. Why do researchers integrate/combine/mesh/blend/mix/merge/fuse quantitative and qualitative research? In: M.M. Bergman, ed. *Advances in mixed methods research*. London: Sage Publications., pp.87-100.

Bryman, A., 2012. *Social Research Methods*. 4th ed. New York: Oxford University Press.

Campion, J. and Rocco, S., 2009. Minding the mind: The effects and potential of a school-based meditation programme for mental health promotion*. Advances in School Mental Health Promotion*, 2(1), pp.47-55.

Cappella, E., Massetti, G.M. and Yampolsky, S., 2009. Rigorous, responsive, and responsible: Experimental designs in school intervention research. In L.M. Dinella, ed. *Conducting science-based psychology research in schools.* Washington, DC: American Psychological Association, pp.51-78.

Carr, L.T., 1994. The strengths and weaknesses of quantitative and qualitative research: what method for nursing? *Journal of advanced nursing*, 20(4), pp.716-721.

Carr, M., 1995. Dispositions as an Outcome for Early Childhood Curriculum. *Proceedings of the 5th European Conference on Quality of Early Childhood Education*, 7-9 September 1995. Paris: La Sorbonne, pp.1-18.

Carr, M., 2001. *Assessment in early childhood settings: Learning stories*. Thousand Oaks: Sage Publications.

Carsley, D., Khoury, B. and Heath, N.L., 2018. Effectiveness of mindfulness interventions for mental health in schools: A comprehensive meta-analysis. *Mindfulness*, 9(3), pp.693-707.

Carver, C.S. and Scheier, M.F., 2004. Self-regulation of action and affect. In: K.D. Vohs and R.F. Baumeister, eds. *Handbook of self-regulation: Research, theory, and applications.* 3rd ed. New York: Guildford, pp.13-39.

Chan, W.L., 2010. The transition from kindergarten to primary school, as experienced by teachers, parents and children in Hong Kong. *Early Child Development and Care,* 180(7), pp.973-993.

Chan, L.K.S. and Chan, L., 2003. Early childhood education in Hong Kong and its challenges. *Early Child Development and Care,* 173(1), pp.7-17.

Chan, C., and Yeung, L., 2013. *Winning a primary school place: it's a lottery* [Online]. Hong Kong: South China Morning Post. Available from: https://www.scmp.com/lifestyle/families/article/1234652/winning-primary-school-place-its-lottery. [Accessed 20 December 2018].

Chao, R.,1994. Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development,* 65(4), pp.1111-1119.

Charles, C.M., 1995. *Introduction to educational research.* 2nd ed. San Diego: Longman.

Chavajay, P. and Rogoff, B., 1999. Cultural variation in management of attention by children and their caregivers. *Developmental Psychology*, 35(4), pp.1079-1090.

Chawla-Duggan, R., 2016. Pedagogy and quality in Indian slum school settings: A Bernsteinian analysis of visual representations in the Integrated Child Development Service, *Research in Comparative and International Education,* 11(3), pp. 298 –321.

Chawla-Duggan, R., Konantambigi, R., Mei Seung Lam, M. And Sollied, S., 2019. A visual methods approach for researching children's perspectives: capturing the dialectic and visual reflexivity in a cross-national study of father-child interactions. *International Journal of Social Research Methodology, DOI: 10.1080/13645579.2019.1672283.*

Cheung, E. and Chiu, P., 2018. *Students at breaking point: Hong Kong announces emergency measures after 22 suicides since the start of the academic year* [Online]. Hong Kong: South China Morning Post. Available from: https://www.scmp.com/news/hong-kong/health-environment/article/1923465/students-breaking-point-hong-kong-announces [Accessed 20 December 2018].

Chi, B., Jastrzab, J. and Melchior, A., 2006. *Developing indicators and measures of civic outcomes for elementary school students*. Baltimore: The Center for Information and Research on Civic Learning and Engagement.

Chilvers, D. and Cole, A., 2006. Using sensory approach with children who challenge. *Support for Learning*, 21(1), pp.30-32.

Chun, W.N., 2003. A study of children's difficulties in transition to school in Hong Kong. *Early Child Development and Care*, 173(1), pp.83-96.

Clark, A., 2005. Ways of seeing: Using the mosaic approach to listen to young children's perspectives. In: A. Clark, A.T. Kjørholt and P. Moss, eds. *Beyond listening: Children's perspectives on early childhood services.* Bristol: Policy Press, pp.29-49.

Clark, A., 2017. *Listening to young children: A guide to understanding and using the mosaic approach*. 3rd ed. London: Jessica Kingsley Publishers.

Clonan, S.M., Chafouleas, S.M., McDougal, J.L. and Riley-Tillman, T.C., 2004. Positive psychology goes to school: Are we there yet? *Psychology in the Schools*, 41(1), pp.101-110.

Cohen, D. and Crabtree, B., 2006. *Qualitative Research Guidelines Project.* http://www.qualres.org/HomeEval-3664.html

Conduct Problems Prevention Research Group. Parent - Social Competence Scale, 1995. *Social Competence Scale*. Retrieved from the Fast Track Project Web site, http://www.fasttrackproject.org.

Connolly, P., 2007. *Quantitative data analysis in education: A critical introduction using SPSS*. New York: Routledge.

Cook-Sather, A., 2006. Sound, presence, and power: 'Student voice' in educational research and reform. *Curriculum Inquiry*, 36(4), pp.359-390.

Copple, C. and Bredekamp, S., eds, 2009. *Developmentally appropriate practice in early childhood programs serving children from birth through age 8*. 3rd ed. Washington, D.C.: National Association for the Education of Young Children.

Craig, C., 2007. *The potential dangers of a systematic, explicit approach to teaching social and emotional skills (SEAL).* Centre for Confidence and Wellbeing.

Creswell, J.D., 2017. Mindfulness Interventions, *Annual Review of Psychology*. (68), pp.491-516.

Creswell, J.W., 2015. *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. 5th ed. Boston: Pearson.

Creswell, J.W. and Clark, V.L.P., 2007. *Designing and conducting mixed methods research*. Thousand Oaks: Sage Publications.

Curriculum Development Council, 2006. *Guide to the pre-primary curriculum*. Hong Kong: Curriculum Development Institute.

Curriculum Development Council, 2017. *Kindergarten Education Curriculum Guide*. Hong Kong: Curriculum Development Institute.

Dahlberg, G. and Moss, P., 2005. *Ethics and politics in early childhood education*. Oxford: Routledge.

Dahlberg, L.L., Toal, S.B., Swahn, M.H. and Behrens, C.B., 2005. *Measuring violence-related attitudes, behaviors, and influences among youths: A compendium of assessment tools*. Atlanta: Centers for Disease Control and Prevention.

Davis, L. and Kurzban S., 2012. Mindfulness-based treatment for people with severe mental illness: a literature review. *American Journal of Psychiatric Rehabilitation,* 15(2), pp.202-232.

Denham, S., 2006. Social–Emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development*, 17(1), pp.57-89.

Denham, S., Bassett, H., Way, E., Mincic, M., Zinsser. K. and Graling, K., 2012. Preschoolers' emotion knowledge: Self-regulatory foundations, and predictions of early school success. *Cognitive Emotion*, 26(4), pp. 667–679.

Denicolo, P., Long, T. and Bradley-Cole, K., 2013. *Constructivist approaches and research methods: A practical guide to exploring personal meanings*. London: Sage Publications.

Denzin, N., 2006. *Sociological methods: A sourcebook.* 5th ed. Chicago: Aldine Transactions.

Diamond, A., 2006. The early development of executive functions. In E. Bialystock and F.I.M. Craik., eds. *The early development of executive functions. Lifespan cognition: Mechanisms of change.* Oxford: Oxford University Press, pp.70-95.

Diamond, A. and Lee, K., 2011. Interventions and programs demonstrated to aid executive function development in children 4–12 years of age. *Science,* 333(6045), pp.959-964.

Dodge, R., Daly, A., Huyton, J. and Sanders, L., 2012. The challenge of defining well-being. *International Journal of Well-being*, 2(3), pp.222-235.

Domitrovich, C.E. and Greenberg, M.T., 2000. The study of implementation: Current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational and Psychological Consultation*, 11(2), pp.193-221.

Dottin, E.S., 2009. Professional judgment and dispositions in teacher education. *Teaching and Teacher Education*, 25(1), pp. 83-88.

Drake, P. and Heath, L., 2010. *Practitioner research at doctoral level: Developing coherent research methodologies*. London: Routledge.

Duckworth, A.L., Quinn, P.D. and Seligman, M.E., 2009. Positive predictors of teacher effectiveness. *The Journal of Positive Psychology*, 4(6), pp.540-547.

Dunn, W., 2001. The sensations of everyday life: Empirical, theoretical, and pragmatic considerations. *American Journal if Occupational Therapy*, 55, pp.608-620.

Easterbrook, G., 2003. *The progress paradox: How life gets better while people feel worse*. New York: Random House.

Ecclestone, K., 2007. All in the Mind, *The Guardian*. 27 February.

Ecclestone, K. and Hayes, D., 2009. *The dangerous rise of therapeutic education,* UK: Routledge.

Education Department, 1999. *List of dos and don'ts for kindergartens*. Schools curriculum circular No. 4/99. Hong Kong: Education Department.

Education Department, 2001. *Domain on learning and teaching* [Online]. Hong Kong: Educational Department. Available from: https://www.edb.gov.hk/attachment/en/edu-system/preprimary-kindergarten/quality-assurance-framework/performance-indicators-pre-primary-institutions/lt_kge2.pdf [Accessed 21 March 2016].

Eisenberg, N., Fabes, R.A., Murphy, B., Karbon, M., Smith, M. and Maszk, P., 1996. The relations of children's dispositional empathy-related responding to their emotionality, regulation, and social functioning. *Developmental Psychology, 32*(2), pp.195-209.

Eisenberg, N. and Mussen, P.H., 1989. *The roots of prosocial behavior in children.* New York: Cambridge University Press.

Elliott, V., 2018. Thinking about the Coding Process in Qualitative Data Analysis. *The Qualitative Report*, 23(11), 2850-2861. Retrieved from https://nsuworks.nova.edu/tqr/vol23/iss11/14

Ergas, O. and Hadar, LL., 2019. Mindfulness in and as education: a map of a developing academic discourse from 2002 to 2017, *Review of Education*.

Erwin, E.J., 2017. Transparency in early childhood education: What the West can learn from Australia's focus on wellbeing. *Global Education Review*, 4(3), pp. 56-69.

Erwin, E.J. and Robinson, K., 2015. The joy of being: Making way for young children's natural mindfulness. *Early Child Development and Care*, 186(2), pp.1-19.

Erwin, E.J., Robinson, K. and Aveta, D., 2017. Being present: An exploratory study on the use of mindfulness in early childhood The International *Journal of Holistic Early Learning and Development*, 4, pp.1-17.

Erwin, E.J., Robinson, K.A., McGrath, G.S. and Harney, C.J., 2017. It's like breathing in blue skies and breathing out stormy clouds: Mindfulness practices in early childhood. *Young Exceptional Children,* 20(2) pp. 69-85.

Farokhi, M. and Hashemi, M., 2011. The analysis of children's drawings: social, emotional, physical, and psychological aspects. *Procedia-Social and Behavioral Sciences*, 30, pp.2219-2224.

Field, A., 2013. *Discovering statistics using IBM SPSS statistics*. Thousand Oaks: Sage Publications.

Flick, U., 2011. *Introducing research methodology: A beginner's guide to doing a research project*. London: Sage Publications.

Flick, U., ed., 2014. Mapping the field. In: U. Flick, ed. *The SAGE handbook of qualitative data analysis*. London: Sage Publications, pp.1-18.

Flook, L., Goldberg, S.B., Pinger, L., Bonus, K. and Davidson, R.J., 2013. Mindfulness for teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. *Mind, Brain, and Education*, 7(3), pp.182-195.

Flook, L., Goldberg, S.B., Pinger, L. and Davidson, R.J., 2015. Promoting prosocial behavior and self-regulatory skills in preschool children through a mindfulness-based kindness curriculum. *Developmental psychology*, 51(1), pp.44-51.

Flook, L., Smalley, S.L., Kitil, M.J., Galla, B.M., Kaiser-Greenland, S., Locke, J. and Kasari, C., 2010. Effects of mindful awareness practices on executive functions in elementary school children. *Journal of Applied School Psychology*, 26(1), pp.70-75.

Fraenkel, J.R. and Wallen, N.E., 2003. Observation and interviewing. In: J.R. Fraenkel and N.E. Wallen, eds. *How to design and evaluate research in education*. 5th ed. New York: McGraw-Hill Higher Education, pp.455-463.

Fredrickson, B.L., 1998. What good are positive emotions? *Review of general psychology*, 2(3), pp.300-319.

Friendly, M., Doherty, G. and Beach, J., 2007. *Quality by design: What do we know about quality in early learning and child care and what do we think? A literature review*. Toronto: University of Toronto.

Fung, K.H. and Lam, C.C., 2012. The tension between parents' informed choice and school transparency: Consumerism in the Hong Kong education voucher scheme. *Springer Science*, 44(1), pp.31-52.

Furedi, F., 2014. It will take more than an Oath to change our schools. Spiked. Retrieved from: https://www.spiked-online.com/2014/10/13/it-will-take-more-than-an-oath-to-improve-our-schools/#.VFjqzjSsWic

Furedi, F., 2017. Turning Childhood into Mental Illness. Spiked. Retrieved from https://www.spiked-online.com/2017/12/13/turning-childhood-into-a-mental-illness/#.WjvBivnyjD4

Garg, S., Buckley-Reen, A., Alexander, L., Chintakrindi, R., Ocampo Tan, L.V.C. and Koenig, K., 2013. The effectiveness of a manualized yoga intervention on classroom behaviors in elementary school children with disabilities: A pilot study. *Journal of Occupational Therapy, Schools and Early Intervention*, 6(2), pp.158-164.

Gascoyne, S., 2016. *Sensory play (Play in the EYFS)*. 2nd ed. Mark Allen Group.

Germer, C.K. and Neff, K., 2013. Self-compassion in clinical practice. *Journal of Clinical Psychology,* 69(8), pp.856-867.

Germer, C.K., Siegel, R.D. and Fulton, P.R., eds, 2005. *Mindfulness and psychotherapy*. New York: Guilford Press.

Goffin, S.G., 2000. *The role of curriculum models in early childhood education. ERIC Digest*. Champaign: ERIC Clearinghouse on Elementary and Early Childhood Education, (Information analyses No. ED 443597).

Goffin, S.G. and Wilson, C., 2001. *Curriculum models and early childhood education: Appraising the relationship.* 2nd ed. Upper Saddle River: Merrill/Prentice Hall.

Goodman, T.A. and Kaiser-Greenland, S., 2009. Mindfulness with children: Working with difficult emotions. In: F. Didonna, ed. *Clinical handbook of mindfulness*. New York: Springer, pp.417-429.

Goyal, M., Singh, S., Sibinga, E., Gould, N., Rowland-Seymour, A., Sharma, R., Berger, Z., Sleicher, D., Maron, D., Shihab, H., Ranasinghe, P., Linn, S., Saha, S., Bass, E. and Haythornthwaite, J., 2014. Meditation programs for psychological stress and well-being: a systematic review and meta-analysis. *JAMA Internal Medicine,* 174(3), pp.357-368.

Greenberg, M.T. and Harris, A.R., 2012. Nurturing mindfulness in children and youth: Current state of research. *Child Development Perspectives*, 6(2), pp.161-166.

Greenberg, M.T., Weissberg, R.P., O'Brien, M.U., Zins, J.E., Fredericks, L., Resnik, H. and Elias, M.J., 2003. Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist*, 58(6-7), pp.466-474.

Grey, P., 2011. The decline of play and the rise of psychopathology in children. *American Journal of Play,* 4(3), pp.443-463.

Grossman, P., Niemann, L., Schmidt, S. and Walach, H., 2004. Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research,* 57(1), pp.35-43.

Hannaford, C., 1995. *Why learning is not all in your head*. Arlington, VA: Great Ocean Publishers.

Hargreaves, A., 2007. Sustainable professional learning communities. In: L. Stoll and K.S. Louis, eds. *Professional learning communities: Divergence, depth and dilemmas*. Berkshire: Open University Press, pp.181-196.

Harnett, P.H. and Dawe, S., 2012. The contribution of mindfulness-based therapies for children and families and proposed conceptual integration. *Child and Adolescent Mental Health*, 17(4), pp.195-208.

Harrington, N. and Pickles, C., 2009. Mindfulness and cognitive behavioral therapy: Are they compatible concepts? *Journal of Cognitive Psychotherapy,* 23(4), pp.324-332.

Harry, B. and Lipsky, M., 2014. Qualitative research on special education teacher preparation. In: P.T. Sindelar, E.D. McCray, M.T. Brownell and B. Lignugaris/Kraft, eds. *Handbook of research on special education teacher preparation*. New York: Routledge, pp.473-488.

Hatch, J.A., 2002. A special section on personalized instruction accountability shovedown: Resisting the standards movement in early childhood education. *Phi Delta Kappan*, 83(6), pp.457-462.

Hayes, N., O'Toole, L. and Halpenny, A.M., 2017. *Introducing Bronfenbrenner: A guide for practitioners and students in early years education*. New York: Routledge.

Head Start Resource Center, 2008. *Promoting positive outcomes in early childhood programs serving children 3–5 years old*. [Online]. Arlington: Department of Health and Human Services. Available from: https://www.giarts.org/sites/default/files/Head-Start-Child-Development-Early-Learning-Framework.pdf [Accessed 29 March 2018].

Heale, R. and Twycross, A., 2015. Validity and reliability in quantitative studies. *Evidence-based nursing*, 18(3), pp.66-67.

Hensch, T.K., 2005. Critical period plasticity in local cortical circuits. *National Review Neuroscience*, pp.877-888.

Herman, K.C., Reinke, W.M., Parkin, J., Traylor, K.B. and Agarwal, G., 2009. Childhood depression: Rethinking the role of the school. *Psychology in the Schools*, 46(5), pp.433-446.

Ho, C.W., 2008. Exploring the definitions of quality early childhood program in a market-driven context: Case studies of two Hong Kong preschools. *International Journal of Early Years Education*, 16(3), pp.223-236.

Hoffman, M.L., 2008. Empathy and prosocial behavior. In: M. Lewis, J.M. Haviland-Jones and L.F. Barrett, eds. *Handbook of emotions*. 3rd ed. New York: The Guilford Press, pp.440-455.

Hölzel, B.K., Lazar, S.W., Gard, T., Schuman-Olivier, Z., Vago, D.R. and Ott, U., 2011. How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective*. Perspectives on Psychological Science*, 6(6), pp.537-559.

Housman, D., 2017. The importance of emotional competence and self-regulation from birth: A case for the evidence-based emotional cognitive social early learning approach. *International Journal of Child Care and Education Policy*, pp.1-19.

Hsieh, H. F. and Shannon, S. E., 2005. Three approaches to qualitative content analysis. *Qualitative Health Research*, 15, pp.1227-1288.

Hue, M.T., 2007. Emergence of Confucianism from teachers' definitions of guidance and discipline in Hong Kong secondary schools. *Research in Education*, 78(1), pp.21-33.

Huebner, S. and Hills, K., 2011. Does the positive psychology movement have legs for children in schools? *The Journal of Positive Psychology*, 6(1), pp.88-94.

Huizinga, M., Dolan, C.V. and van der Molen, M.W., 2006. Age-related change in executive function: Developmental trends and a latent variable analysis. *Neuropsychologia*, 44(11), pp.2017-2036.

Huppert, F.A. and Johnson, D.M., 2010. A controlled trial of mindfulness training in schools: The importance of practice for an impact on well-being. *Journal of Positive Psychology*, 5(4), pp.264-274.

Hyland, P., Lee, R. and Mills, M., 2015. Mindfulness at work: A new approach to improving individual and organizational performance. *Industrial and Organizational Psychology*, 8(4), pp.576-602.

Hyson, M. and Taylor, J., 2011. Caring about caring: What adults can do to promote young children's prosocial skills. *Young Children*, 66(4), pp.74-83*.*

Jackson, P.W.,1968. *Life in Classrooms.* New York: Holt, Rhinehart and Winston.

Johnson, R.B., Onwuegbuzie, A.J. and Turner, L.A., 2007. Toward a definition of mixed methods research. *Journal of mixed methods research*, 1(2), pp.112-133.

Johnson, A.E., Forston, J.L., Gunnar, M.R., and Zelazo, P.D., 2011. A randomized controlled trial of mindfulness meditation training in preschool children. *Poster presented at the biennial meeting of the Society for Research in Child Development*, Montreal, QC.

Jones, S.M. and Bouffard, S.M., 2012. Social and emotional learning in schools: From programs to strategies and commentaries. *Social Policy Report*, 26(4), pp.1-33*.*

Jones D.E., Greenberg M. and Crowley M., 2015. Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health*. 105(11), pp.2283–2290.

Joppe, M., 2000. *The Research Process*. [Online] Available from: http://www.ryerson.ca/~mjoppe/rp.htm [Accessed 18 June, 2016].

Kabat-Zinn, J., 1990*. Full catastrophe living: How to cope with stress, pain and illness using mindfulness meditation*. New York: Dell.

Kabat-Zinn, J., 1994. *Wherever you go, there you are*. New York: Hyperion.

Kabat-Zinn, J., 2003. Mindfulness: The heart of rehabilitation. In: E. Leskowitz, ed. *Complementary and alternative medicine in rehabilitation.* Saint Louis: Churchill Livingstone, pp.11-15.

Katz, L. and McClellan, D.E., 1997. *Fostering children's social competence: The teachers' role*. Washington, D.C.: National Association for the Education of Young Children.

Katz, L., 1993. *Dispositions: Definitions and implications for early childhood practices*. Urbana: ERIC Clearinghouse on EECE.

Khoury, B., Lecomte, T., Gaudiano, B.A. and Paquin, K., 2013. Mindfulness interventions for psychosis: a meta-analysis. *Schizophrenia research*, 150(1), pp.176-184.

Kim, E. and Lim, J., 2007. Eco-early childhood education: A new paradigm of early childhood education in South Korea. *Young Children*, 62(6), pp.42-45.

Kirby, J.R. and Lawson, M.J., eds, 2012. *Enhancing the quality of learning: Dispositions, instruction, and learning processes*. Cambridge: Cambridge University Press.

Kitzinger, J., 1994. The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health and Illness, 16.*

Klatt, M., Harpster, K., Browne, E., White, S. and Case-Smith, J., 2013. Feasibility and preliminary outcomes for move-into-learning: an arts-based mindfulness classroom intervention. *The Journal of Positive Psychology*, 8(3), pp.233-241.

Kochanska, G., Coy, K. and Murray, K., 2001. The development of self-regulation in the first four years of life. *Child Development,* 72(4), pp.1091-111.

Krägeloh, C., 2013. Is mindfulness conceptualized differently in Western mindfulness-based interventions than in Buddhism? *Won-Buddhist Thought and Religious Culture*, 55, pp.447-479.

Kress, G.,1997. *Before writing: Rethinking the paths to literacy*. London: Routledge.

Kuhl, J., 2000. A functional-design approach to motivation and self-regulation: The dynamics of personality systems interactions. In: M. Boekaerts, P.R. Pintrich and M. Zeider, eds. *Handbook of self-regulation*. San Diego: Academic Press, pp.111-169.

Kuyken, W., Weare, K., Ukoumunne, O.C., Vicary, R., Motton, N., Burnett, R., Cullen, C., Hennelly, S. and Huppert, F., 2013. Effectiveness of the mindfulness in schools programme: non-randomised controlled feasibility study. *The British Journal of Psychiatry*, 203(2), pp.126-131.

Kvale, S., 2007. *Doing interviews*. Los Angeles: Sage.

Kyriacou, C., 2012. Children's social and emotional well-being in schools: A critical perspective. By D. Watson, C. Emery and P. Bayliss with M. Boushel and K. McInnes. *British Journal of Educational Studies*, 60(4), pp.439-454.

Lam, K., 2016. School-based cognitive mindfulness intervention for internalizing problems: Pilot study with Hong Kong elementary students. *Journal of Child and Family Studies,* 25(11), pp.3293-3308.

Lam, C.C., Lau, N.S., Lo, H.H. and Woo, D.M.S., 2015. Developing mindfulness programs for adolescents: Lessons learned from an attempt in Hong Kong. *Social Work in Mental Health*, 13(4), pp.365-389.

Langer, E., 1992. Matters of mind: Mindfulness/mindlessness in perspective. *Consciousness and Cognition,* 1(3), pp.289-305.

Lau, N.S. and Hue, M.T., 2011. Preliminary outcomes of a mindfulness-based programme for Hong Kong adolescents in schools: Well-being, stress and depressive symptoms. *International Journal of Children's Spirituality*, 16(4), pp.315-330.

Lee, W.O., 1996. The cultural context for Chinese learners: Conceptions of learning in the Confucian tradition. In: D.A. Watkins and J.B. Biggs, eds. *The Chinese learner: Cultural, psychological and contextual influences*. Hong Kong: CERC and ACER, pp.25-41.

Leech N.L. and Onwuegbuzie A.J., 2002. A call for greater use of nonparametric statistics. *Proceedings of the 31st Annual Meeting of the Mid-South Educational Research Association*, 6-8 November 2002, Chattanooga: MSERA.

Leschied, A.W., Saklofske, D.H. and Flett, G.L., eds, 2018. *The handbook of school-based mental health promotion: An evidence informed framework for implementation*. NewYork, NY: Springer.

Li, H. and Rao, N., 2000. Parental influences on Chinese literacy development: A comparison of preschoolers in Beijing, Hong Kong, and Singapore. *International Journal of Behavioral Development*, 24(1), pp.82-90.

Liehr, P. and Diaz, N., 2010. A pilot study examining the effect of mindfulness on depression and anxiety for minority children. *Archives of Psychiatric Nursing, 24*(1), pp.69-71.

Lillard, A.S., 2011. Mindfulness Practices in Education: Montessori's Approach. *Mindfulness*, (2), pp.78–85.

Lim, X. and Qu, L., 2017. The effect of single-session mindfulness training on preschool children's attentional control. *Mindfulness*, 8(2), pp.300-310.

Lincoln, Y.S. and Guba, E.G., 1985. *Naturalistic inquiry*. Newbury Park, CA: Sage Publications.

Lindqvist, G. 2001. When small children play how adults dramatise and children create meaning. *Early Years*, 21(1), pp.7-14.

Linley, A., Joseph, S., Harrington, S. and Wood, A., 2006. Positive psychology: Past, present, and (possible) future, *The Journal of Positive Psychology*, 1(1), pp.3-16.

Lok-kei, S., 2018. *One in three young Hong Kongers suffering from mental health issues* [Online]. Hong Kong: South China Morning Post. Available from: https://www.scmp.com/news/hong-kong/health-environment/article/2149403/one-three-young-hongkongers-suffers-stress-anxiety [Accessed 28 September 2018].

Lopes, P.N., Salovey, P., Côté, S. and Beers, M., 2005. Emotion regulation ability and the quality of social interaction. *Emotion*, 5(1), pp.113-118.

Lutz, A., Slagter, H.A., Dunne, J. and Davidson, R.J., 2008. Attention regulation and monitoring in meditation. *Trends in Cognitive Sciences*, 12(4), pp.163-169.

MacDonald, A., 2009. Drawing stories: The power of children's drawings to communicate the lived experience of starting school. *Australasian Journal of Early Childhood*, 34(3), pp.40-50.

Mackey, S., 2000. Towards a definition of wellness. *Australian Journal of Holistic Nursing*, 7(2), pp.34-38.

Malterud, K., 2001. Qualitative Research: Standards, Challenges, and Guidelines. *The Lancet,* 358(9280), pp.483-8

Matthews, J., 1999. *The art of childhood and adolescence: The construction of meaning.* London: Falmer Press.

Marcon, R.A., 1999. Differential impact of preschool models on development and early learning of inner-city children: A three-cohort study. *Developmental Psychology*, 35(2), pp.358-375.

Mayer, J.D., Salovey, P. and Caruso, D.R., 2008. Emotional intelligence: New ability or eclectic traits? *American Psychologist*, 63(6), pp.503-517.

Maynard, B.R., Solis, M.R., Miller, V.L. and Brendel, K. E., 2017. Mindfulness-based Interventions for Improving Cognition, Academic Achievement, Behaviour, and Socioemotional functioning of Primary and Secondary School Students. Campbell Systematic Reviews, 5.

McConnell, S.R., Strain, P.S., Kerr, M.M., Stagg, V., Lenkner, D.A. and Lambert, D.L., 1984. An empirical definition of elementary school adjustment: Selection of target behaviors for a comprehensive treatment program. *Behavior Modification*, 8(4), pp.451-473.

McLaughlin, C., 2008. Emotional well-being and its relationship to schools and classrooms: a critical reflection, *British Journal of Guidance and Counselling*, 36(4), pp. 353-366.

Meiklejohn, J., Phillips, C. and Freedman, M.L., 2012. Integrating mindfulness training into K-12 education: Fostering the resilience of teachers and students. *Mindfulness*, 3(4), pp. 291-307.

Mertens, D., 2012. Ethics in Qualitative Research in Education and the Social Sciences In: Lapan, S., Quartaroli, M., Riemer, F.J., eds. *Qualitative research: An introduction to methods and designs*. CA: Jossy-Bass.

Miles, S.B. and Stipek, D., 2006. Contemporaneous and longitudinal associations between social behavior and literacy achievement in a sample of low-income elementary school children. *Child Development,* 77(1), pp.103-117.

Mindfulness All-Party Parliamentary Group, 2015. *The Mindfulness Initiative*. Sheffield: Mindful Nation UK.

Ministry of Education, 1996. *Te Whāriki*. Wellington: Learning Media.

Mische Lawson, L., Cox, J. and Labrie Blackwell, A., 2012. Yoga as a classroom intervention for preschoolers. *Journal of Occupational Therapy, Schools, and Early Intervention*, 5(2), pp.126-137.

Morgan, D., 2013. *Integrating qualitative and quantitative methods*. CA: Sage Publications

Nagel, B. and Williams, N., 2013. *Methodology brief: Introduction to focus groups*. [Online] Falls Church: Center for Assessment, Planning and Accountability. Available from: http://www.mmgconnect.com/projects/userfiles/file/focusgroupbrief.pdf [Accessed 29 March 2018].

Napoli, M., Krech, P.R. and Holley, L.C., 2005. Mindfulness training for elementary school students: The attention academy. *Journal of Applied School Psychology*, 21(1), pp.99-125.

National Association for the Education of Young Children [NAEYC], 2018. *3 Core Considerations of DAP*., [Online] https://www.naeyc.org/resources/topics/dap/3-core-considerations [Accessed 29 March 2018].

National Research Council and Institute of Medicine, 2001. *Early childhood development and learning: New knowledge for policy.* Washington, DC: National Academy Press.

National Scientific Council on the Developing Child, 2004. Children's emotional development is built into the architecture of their brains: Working Paper No 2, retrieved from Center on the Developing Child, Harvard University. [Online]. Available at: https://developingchild.harvard.edu/resources/childrens-emotional-development-is-built-into-the-architecture-of-their-brains/ [Accessed 10 May 2017].

Neville, H.J., Stevens, C., Pakulak, E., Bell, T.A., Fanning, J., Klein, S. and Isbell, E., 2013. Family-based attention training program *Proceedings of the National Academy of Sciences*, 110 (29), pp.12138-12143.

Ng, S.S.N. and Rao, N., 2005. Teaching mathematics in Hong Kong: A comparison between the pre-primary and early primary years. *Hong Kong Journal of Early Childhood*, 4(1), pp.30-36.

NHS Dumfries and Galloway, 2016. Understanding Sensory Development Universal Presentation Occupational Therapy for Children and Young People. Retrieved from http://www.nhsdg.scot.nhs.uk/Departments_and_Services/Child_Occupational_Therapy/Documents/Understanding_Sensory_Development.pdf

Northern Arizona University, n.d. *Sphericity in Repeated Measures Analysis of Variance,* [Online], Available from: http://oak.ucc.nau.edu/rh232/courses/EPS625/Handouts/RM-ANOVA/Sphericity.pdf [Accessed 29 March 2019].

Novak, S.P. and Clayton, R.R., 2001. The influence of school environment and self-regulation on transitions between stages of cigarette smoking: A multilevel analysis. *Health Psychology*, 20(3), pp.196-207.

Nowell, L.S., Norris, J.M., White, D.E. and Moules, N.J., 2017. Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*.

Nyumba, T., Wilson, K., Derrick, C. and Mukherjee, N., 2017. The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, [online] 9(1), pp.20-32.

Oberle, E. and Schonert-Reichl, K.A., 2016. Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science and Medicine*, 159, pp.30-37.

O'Donoghue, T. and Punch, K., 2003, *Qualitative educational research in action: Doing and reflecting*. London: Falmer Press.

Ontario Ministry of Education, 2016. *The kindergarten program* [Online]. Ontario: Queens Printer. Available from: https://files.ontario.ca/books/edu_the_kindergarten_program_english_aoda_web_oct7.pdf [Accessed 25 June 2017].

O'Toole, C., Furlong, M., McGilloway, S. and Bjorndal, A., 2017. Preschool and school-based mindfulness programmes for improving mental health and cognitive functioning in young people aged 3 to 18 years. *Cochrane Database of Systematic Reviews* [Online], Available from: http://mural.maynoothuniversity.ie/8283/ [Accessed 29 March 2018].

Orpinas, P. and Horne, A. M., 2010. Creating a positive school climate and developing social competence. In S. R. Jimerson, S. M. Swearer, and D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (p. 49–59). Routledge/Taylor and Francis Group.

Palouse Mindfulness: *Mindfulness-Based Stress Reduction*, n.d. [Online]. https://palousemindfulness.com/ [Accessed 25 June 2015].

Pearson, E. and Rao, N., 2006. Early childhood policy reform in Hong Kong: Challenges in effecting change in practices. *Childhood Education*, 82(6), pp.363-368.

Pease, B., 1988. The ABCs of social work student evaluation. *Journal of Teaching in Social Work*, 2(2), pp.35-50.

Penn, H., 2005. *Unequal childhoods: Young children's lives in poor countries.* London and New York: Routledge.

Poehlmann-Tynan, J., Vigna, A.B., Weymouth, L.A., Gerstein, E.D., Burnson, C., Zabransky, M., Lee, P. and Zahn-Waxler, C., 2016. A pilot study of contemplative practices with economically disadvantaged preschoolers: Children's empathic and self-regulatory behaviours. *Mindfulness*, 7(1), pp.46–58.

Poggenpoel, M. and Myburgh, C., 2003. The researcher as research instrument in educational research: A possible threat to trustworthiness? *Education,* 124(2), pp.418-421.

Popoveniuc, B., 2014. Self Reflexivity. The Ultimate End of Knowledge. *Procedia - Social and Behavioral Sciences*,163, pp.204-213.

Posner, M.I., Rothbart, M.K. and Rueda, M.R., 2014. Developing attention and self-regulation in childhood. In A. C. Nobre and S. Kastner, eds. *Oxford library of psychology. The Oxford handbook of attention*. Oxford: Oxford University Press, pp. 541–569.

Ramasubramanian, S., 2017. Mindfulness, stress coping, and everyday resilience among emerging youth in a university setting: A mixed methods approach. *International Journal of Adolescence and Youth*, 22(3), pp.308-321.

Rao, N., 2010. Educational policy, kindergarten curriculum guidelines and the quality of teaching and learning: Lessons from kindergarten in Hong Kong. *International Journal of Early Childhood Education*, 16(2), pp.27–39.

Rao, N. and Li, H., 2009. Quality matters: Early childhood education policy in Hong Kong. *Early Child Development and Care*, 179(3), pp.233-245.

Rao, N. and Koong, M., 2000. Enhancing preschool education in Hong Kong. *International Journal of Early Childhood*, 32(2), pp.1-11.

Rao, N., Koong, M., Kwong, M. and Wong, M., 2003. Predictors of preschool process quality in a Chinese context*. Science Direct*, 18(3), pp.331-350.

Raver, C.C. and Knitzer, J., 2002. *Ready to enter: What research tells policy makers about strategies to promote social and emotional school readiness among three and four-year-olds*. Washington, D.C.: National Center for Children in Poverty.

Razza, R., Bergen-Cico, D. and Raymond, K., 2015. Enhancing preschoolers' self-regulation via mindful yoga. *Journal of Child and Family Studies*, 24(2), pp.372-385.

Reggio Children, n.d. *The Hundred Languages of Children* [Online]. Reggio Emilia: Reggio Children. Available from: https://www.reggiochildren.it/mostra/i-cento-linguaggi-dei-bambini-2/?lang=en [Accessed 15 November 2016].

Rempel, K., 2012. Mindfulness for children and youth: A review of the literature with an argument for school-based implementation. *Canadian Journal of Counselling and Psychotherapy*, 46(3), pp.201-220.

Richardson, A.J., 2012. Paradigms, theory and management accounting practice: A comment on Parker (forthcoming) 'Qualitative management accounting research: Assessing deliverables and relevance'. *Critical Perspectives on Accounting*, 23(1), pp.83-88.

Ritchhart, R. and Perkins, D.N., 2000. Life in the mindful classroom: Nurturing the disposition of mindfulness. *The Society for the Psychological Study of Social Issues*, 56(1), pp.27-47.

Ros-Voseles, D.A., and Fowler-Haughey, S. 2007. Why Children's Dispositions Should Matter to All Teachers.

Roeser, R.W., Skinner, E., Beers, J. and Jennings, P.A., 2012. Mindfulness training and teachers' professional development: An emerging area of research and practice. *Child Development Perspectives,* 6(2), pp.167-173.

Rogoff, B., 2003. *The cultural nature of human development*. New York: Oxford University Press.

Rose, J., Gilbert, L. and Richards, V., 2016. *Health and well-being in early childhood.* London: Sage Publications.

Rubin, K. H. and Rose-Krasnor, L.,1992. Interpersonal problem solving. In V. B. Van Hasselt and M. Hersen. eds. *Handbook of social development*. New York: Plenum Press*,* pp.283–323.

Ruff, H.A. and Rothbart, M.K., 1996. *Attention in early development: Themes and variations*. Oxford: Oxford University Press.

Ryan, R.M. and Deci, E.L., 2001. On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual review of psychology*, 52(1), pp.141-166.

Saldana, J., 2016. *The coding manual for qualitative researchers.* 3rd ed*.* London: Sage Publications.

Salkind, N.J., 2016. *Statistics for people who (think they) hate statistics*. London: Sage Publications.

Sarantakos, S., 2005. *Social research methods.* 3rd ed. New York: Macmillan*.*

Schanzenbach, D.W., 2012. Limitations of Experiments in Education Research *Association for Education Finance and Policy*, pp.219-232.

Schoeberlein, D.R. and Seth, S., 2009. *Mindful teaching and teaching mindfulness: A guide for anyone who teaches anything*. Somerville: Wisdom Publications.

Schonert-Reichl, K.A. and Hymel, S., 2007. Educating the heart as well as the mind social and emotional learning for school and life success. *Education Canada*, 47(2), pp.20-25.

Schonert-Reichl, K.A. and Lawlor, M.S., 2010. The effects of a mindfulness-based education program on pre- and early adolescent's well-being and social and emotional competence. *Mindfulness*, 1(3), pp.137-151.

Schonert-Reichl, K.A., Oberle, E., Lawlor, M.S., Abbott, D., Thomson, K., Oberlander, T.F. and Diamond, A., 2015. Enhancing cognitive and social–emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A randomized controlled trial. *Developmental Psychology*, 51(1), pp.52-66.

Schonert-Reichl, K.A. and Roeser, R.W., eds, 2016. *Handbook of mindfulness in education: Integrating theory and research into practice*. New York: Springer.

Schweinhart, L.J. and Weikart, D.P.,1997. The High/Scope preschool curriculum comparison study through age 23. *Early Childhood Research Quarterly*, 12(2), pp.117-143.

Shamoo A. and Resnik D., 2015. *Responsible conduct of research*, 3rd ed. New York: Oxford University Press.

Segal, Z.V., Teasdale, J.D., Williams, M. and Gemar, M., 2002. The Mindfulness-based cognitive therapy adherence scale: Inter-rater reliability, adherence to protocol and treatment distinctiveness. *Clinical Psychology and Psychotherapy,* 9(2), pp.131-138.

Segal, Z.V. and Walsh, K.M., 2016. Mindfulness based cognitive therapy for residual depressive symptoms and relapse prophylaxis. *Current Opinion in Psychiatry*, 29(1), pp.7-12.

Segal, Z.V., Williams, M. and Teasdale, J.D., 2013. *Mindfulness-Based Cognitive Therapy for Depression* (2nd ed.). New York: The Guilford Press.

Segool, N.K., Carlson, J.S., Goforth, A.N., von der Embse, N. and Barterian, J.A., 2013. Heightened test anxiety among young children: elementary school students' anxious responses to high-stakes testing. *Psychology in the Schools,* 50(5), pp.489-499.

Seligman, M.E. and Csikszentmihalyi, M., 2000. *Positive psychology: An introduction*. *American Psychologist*, 55(1), pp.5-14.

Seligman, M.E., Ernst, R.M., Gillham, J., Reivich, K. and Linkins, M., 2009. Positive education: Positive psychology and classroom interventions. *Oxford review of education*, 35(3), pp.293-311.

Semple, R.J. and Lee, J., 2014. Mindfulness-Based Cognitive Therapy for Children**.** In: R. Baer, ed. *Mindfulness-based treatment approaches, Clinicians guide to evidence base and applications practical resources.* 2nd ed. Kentucky: Elsevier Inc, pp.161-188.

Semple, R.J., Droutman, V. and Reid, B.A., 2017. Mindfulness goes to school: Things learned (so far) from research and real-world experiences. *Psychology in the Schools*, 54(1), pp.29-52.

Semple, R.J., Reid, E. and Miller, L., 2005. Treating anxiety with mindfulness: An open trial of mindfulness training for anxious children. *Journal of Cognitive Psychotherapy*, 19(4), pp.379-392.

Shapiro, S.L. and Carlson, L.E., 2009. *The art and science of mindfulness: Integrating mindfulness into psychology and the helping professions.* Washington, DC: American Psychological Association Publications.

Shin, D. and Johnson, D., 1978. Avowed happiness as an overall assessment of the quality of life. *Social Indicators Research*, 5(1-4), pp.475-492.

Shonkoff, J.P., Boyce, W.T. and McEwen, B.S., 2009. Neuroscience, molecular biology, and the childhood roots of health disparities: Building a new framework for health promotion and disease prevention, *JAMA*, 301(21), pp.2252-2259.

Singh, N.N., Lancioni, G.E., Winton, A.S., Karazsia, B.T. and Singh, J., 2013. Mindfulness training for teachers changes the behavior of their preschool students. *Research in Human Development*, 10(3), pp.211-233.

Spinrad, T.L., Eisenberg, N., Fabes, R.A., Valiente, C., Shepard, S.A. and Guthrie, I.K., 2006. Relation of emotion-related regulation to children's social competence: A longitudinal study. *Emotion,* 6(3), pp.498-510.

Statham, J. and Chase, E., 2010. *Childhood well-being: a brief overview* [Online]. London: Childhood Well-being Research Centre. Available from: http://www.cwrc.ac.uk/resources/documents/CWRC_State_of_Play_briefing_paper_for_DFE_website4Aug2010_(2).pdf [Accessed 26 January 2017].

Strauss, A. and Corbin, J., 1990. *Basics of qualitative research*. London: Sage Publications.

Sun, R.C., Hui, E.K. and Watkins, D., 2006. Towards a model of suicidal ideation for Hong Kong Chinese adolescents. *Journal of adolescence*, 29(2), pp.209-224.

Suter, E.A., 2000. Focus Groups in Ethnography of Communication: Expanding Topics of Inquiry Beyond Participant Observation. *The Qualitative Report*, *5*(1), pp.1-14.

Swick, K.J., Knopf, H., Williams, R. and Fields, M.E., 2013. Family-school strategies for responding to the needs of children experiencing chronic stress. *Early Childhood Education Journal,* 41(3), pp.181-186.

Tawana, B. and Moore, K., 2010. Assessing self-regulation: A guide for out-of-school time program practitioners. *Research to Results*. (Online). https://www.childtrends.org/wp-content/uploads/2010/10/2010-23AssesSelfReg1.pdf

Taylor, N., 2016. *A Critique of Bronfenbrenner's Ecological Systems Theory* [Online]. https://prezi.com/z571-vxisqib/eco-systemic-theory-of-development-urie-bonfenbrenner/[Accessed 26 January 2019].

Tashakkori, A. and Creswell, J.W., 2007. *The new era of mixed methods*. London: Sage Publications.

Teasdale, J.D., Segal, Z. and Williams, J.M.G., 1995. How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? *Behaviour Research and Therapy,* 33(1), pp.25-39.

Teddlie, C. and Tashakkori, A., 2009. *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. London: Sage Publications.

Thierry, K.L., Vincent, R.L., Bryant, H.L., Kinder, M.B. and Wise, C.L., 2018. A self-oriented mindfulness-based curriculum improves prekindergarten students' executive functions. *Mindfulness*, 9(5), pp.1443-1456.

Thierry, K.L., Bryant, H.L., Nobles, S.S. and Norris, K.S., 2016. Two-year impact of a mindfulness-based program on preschoolers' self-regulation and academic performance. *Early Education and Development*, 27(6), pp.805-821.

Tobin, J.J., Wu, D.Y.H. and Davidson, D.H., 1989. *Preschool in three cultures: Japan, China and the United States.* New Haven: Yale University Press.

Travis, J.W. and Ryan, R.S., 2004. *Wellness workbook: How to achieve enduring health and vitality*. New York: Random House Digital.

Twenge, J. and Campbell, W.K., 2018. Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study. *Preventative Medical Reports*, 12, pp.271-283.

Twenge, J., Joiner, T.E., Roger, M.L. and Martin, G.N., 2010. Increases in depressive symptoms, suicide-related outcomes, and suicide rates among U.S.

adolescents after 2010 and links to increased new media screen time. *Clinical Psychological Science*, 6(1), pp.3-17.

UNICEF, 2014. *Survey reveals 90 per cent of students suffer from study pressure* [Online]. Hong Kong: Hong Kong Committee for UNICEF. Available from: https://www.unicef.org.hk/en/home-news-media-press-release-donationshopvolunteerpress-release-survey-reveals-90-per-cent-students-suffer-study-pressure-unicef-hk-mav-helps-children-voice-celebration-cr/ [Accessed 20 May 2016].

United Nations General Assembly, 1989. *The convention on the rights of the child*: Adopted by the General Assembly of the United Nations. Retrieved from http://www.unhcr.org/refworld/docid/3ae6b38f0.html [Accessed 17 Oct 2019].

Van Dam, N., van Vugt, M., Vago, D., Schmalzl, L., Saron, C., Olendzki, A., Meissner, T., Lazar, S., Kerr, C., Gorchov, J., Fox, K., Field, B., Britton, W., Brefczynski-Lewis, J. and Meyer, D., 2017. Mind the hype: A critical evaluation and prescriptive agenda for research on mindfulness and meditation. *Perspectives on Psychological Science*, 13(1), pp.36-61.

Van de Weijer-Bergsma, B., Langenberg, G., Brandsma, R., Oort, F.J. and Bögels, S.M., 2012. The effectiveness of a school-based mindfulness training as a program to prevent stress in elementary school children. *Mindfulness,* 5(3), pp.238-248.

Vickery, C.E. and Dorjee, D., 2016. Mindfulness training in primary schools decreases negative affect and increases meta-cognition in children. *Frontiers in Psychology*, 6(2025).

Victorian Curriculum and Assessment Authority, 2016. *Latest news* [Online]. Melbourne: VSAA. Available from: https://www.vcaa.vic.edu.au/ [Accessed 29 March 2018].

Viruru, R., 2001. *Early childhood education: Postcolonial perspectives from India*. London: Sage Publications.

Vygotsky, L.S., 1978. *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.

Wall, R., 2005. Tai Chi and mindfulness-based stress reduction in a Boston public middle school. *Journal of Pediatric Health Care*, 19(4), pp.230-237.

Waters, L., Barsky, A., Ridd, A. and Allen, K., 2015. Contemplative education: A systematic, evidence-based review of the effect of meditation interventions in schools. *Educational Psychology Review*, 27, pp.103-134.

Watts, J., Cockcroft, K. and Duncan, N., 2009. *Developmental psychology*, 2nd ed., Cape Town: University of Cape Town Press.

Watkins, D.A. and Biggs, J.B., 2001. *Teaching the Chinese learner: Psychological and pedagogical perspectives*. Hong Kong: Comparative Education Research Centre and Australian Council for Educational Research.

Watson, D., Emery, C., Bayliss, P., Bousel, M. and McInnes, K., 2012. *Children's social and emotional wellbeing in schools: A critical perspective.* UK: Policy Press.

Weare, K., 2013. Developing mindfulness with children and young people: A review of the evidence and policy context. *Journal of Children's Services*, 8(2), pp.141-153.

Weare, K., 2018., The evidence for mindfulness in schools for children and young people. UK: Mindfulness in Schools Project.

Wentzel K.R., 2013. School adjustment. In: W. Reynolds and G. Miller eds. *Handbook of psychology, Vol. 7: Educational psychology*. New York: Wiley; pp.235-258.

Willard, C., 2010. *Child's mind: mindfulness practices to help our children be more focused, calm, and relaxed*. Berkeley: Parallax Press.

Willis, E. and Dinehart, L.H., 2014. Contemplative practices in early childhood: implications for self-regulation skills and school readiness. *Early Child Development and Care*, 184(4), pp.487-499.

Wisner, B.L., Jones, B.L. and Gwin, D., 2010. School-based meditation practices for adolescents: a resource for strengthening self-regulation, emotional coping, and self-esteem. *Children and Schools*, 32(3), pp.150-159.

Wolf, A.D., 2000. How to nurture the spirit in non-sectarian environments? *Young Children*, 55(1), pp.34-36.

Wong, J.M.S. and Rao, N., 2015. The evolution of early childhood education policy in Hong Kong. *International Journal of Child Care and Education Policy,* 9(3), pp.1-16.

Wood, L., Roach, A.T., Kearney, M.A. and Zabek, F., 2018. Enhancing executive function skills in preschoolers through a mindfulness-based intervention: A randomized, controlled pilot study. *Psychology in the Schools*, 55(6), pp.644-660.

Woodhead, M., 2005. Early childhood development: A question of rights International. *Journal of Early Childhood,* 37(3), pp.79-98.

Woolfolk, A., 2013. *Educational psychology*. 12th ed. Frenchs Forest: Pearson.

Wyman, P.A., Cross, W., Brown, C.H., Yu, Q., Tu, X. and Eberly, S., 2010. Intervention to strengthen emotional self-regulation in children with emerging mental health problems: Proximal impact on school behaviour. *Journal of Abnormal Child Psychology*, 38(5), pp. 707–720.

Yip, P., 2016. *In the wake of student suicides, let's give Hong Kong's troubled youth some hope, rather than more despair* [Online]. Hong Kong: South China Morning Post. Available from: https://www.scmp.com/comment/insight-opinion/article/1923071/wake-student-suicides-lets-give-hong-kongs-troubled-youth [Accessed 1 February 2017].

Yip, P.S., Liu, K.Y., Lam, T.H., Stewart, S.M., Chen, E. and Fan, S., 2004. Suicidality among high school students in Hong Kong, SAR. *Suicide and Life-Threatening Behavior*, 34(3), pp.284-297.

Young Minds, n.d. *Mental Health Statistics* [Online]. London: YM. Available from: https://youngminds.org.uk/about-us/media-centre/mental-health-stats/ [Accessed 3 February 2019].

Yuen, G. and Grieshaber, S., 2009. Parents' choice of early childhood education services in Hong Kong: A pilot study about vouchers. *Contemporary Issues in Early Childhood*, 10(3), pp.263-279.

Zelazo, P. and Lyons, K., 2012. The potential benefits of mindfulness training in early childhood: A developmental social cognitive neuroscience perspective. *Child Development Perspectives*, 6(2), pp.154-160.

Zelazo P., Forston J.L., Masten, A. and Carlson S., 2018. Mindfulness plus reflection training: Effects on executive function in early childhood. *Frontiers in Psychology* [Online], 9(208). Available from: https://www.frontiersin.org/articles/10.3389/fpsyg.2018.00208/full?utm_source=F-AAE&utm_medium=EMLF&utm_campaign=MRK_556427_69_Psycho_20180301_arts_A [Accessed 29 March 2018].

Zenner, C., Herrnleben-Kurz, S. and Walach, H., 2014. Mindfulness-based interventions in schools-A systematic review and meta-analysis. *Frontiers in Psychology* [Online], 5(603). Available at: https://www.frontiersin.org/articles/10.3389/fpsyg.2014.00603/full [Accessed 29 March 2018].

Zhang, J., 2018. *More Hong Kong students taking their own lives, study by Jokey club suicide research finds* [Online]. Hong Kong: South China Morning Post. Available from: https://www.scmp.com/news/hong-kong/society/article/2163625/more-hong-kong-students-taking-their-own-lives-study-jockey [Accessed 24 January 2019].

Zins, J.E., Weissberg, R.P., Wang, M.C. and Walberg, H.J., 2004. *Building academic success on school social and emotional learning*. New York: Teachers College Press.

Zohrabi, M., 2013. Mixed method research: Instruments, validity, reliability and reporting findings. *Theory and Practice in Language Studies*, 3(2), pp.254-263.

Zoogman, S., Goldberg, S.B., Hoyt, W.T. and Miller, L., 2015. Mindfulness interventions with youth: A meta-analysis. *Mindfulness*, 6(2), pp.290-302.

List of Appendices

Appendix 1

List of Selected Mindfulness Studies in Schools

Study Author	Year	Student age	Number of participants	Length of intervention	Curriculum	Method	Findings
Lau and Hue	2011	14-16	48	6 weeks	Modified MBSR	Mindful Attention Awareness Scale (MAAS) the Freiburg Mindfulness Inventory (FMI)	Significant decrease in depression symptoms Significant improvement in one dimension of well-being among
Napoli, Krech and Holley	2005	1st to 3rd grades	228	12 x for 45 minutes over 24 weeks	Attention Academy Program	RCT	Significant improvements in 3 attentional skills Lower text anxiety Improved social skills
Wall	2005	11-13	11	Not indicated	MBSR type including tai chi and sitting meditation	Self-report	Better sleep Feeling calmer
Kim and Lim	2007	Not indicated	Not indicated	Not indicated	Movement, meditation and relaxation exercise	Not indicated	Happier outlooks
Campion and Rocco	2009	5-18	10000			Semi-structured individual and group interviews with 54 students, 19 teachers and seven parents	More relaxed Increased calmness Less stressed Less angry

Adair and Bhaskaran	2010	2-5	Not indicated	Not indicated	Yoga, mindful eating, Rangoli art	Teacher observation	Improved concentration Improved focus Improved attention spans Improved calmness Less poor behaviour
Flook et al.	2010	7-9		Eight weeks	Mindful Awareness Practice	Control group	Improvements in in Executive Function
Black and Fernando	2012	primary	937 children 47 teachers	Five weeks		Measures	Better self-control More prosocial behaviour Calming abilities Improved attention skills Improved Self Control
Mische Lawson, Cox and Labrie Blackwell	2012	3-5	33 children	Six weeks 10 minutes daily four times a week	YogaRI	Teacher report	Minimal effects on academic performance Minimal effects fine motor skills
Bubela and Gaylord	2014	3-5	27 children	Six weeks for 20 minutes once per week	Hatha Yoga	Teacher report	Increased balance, flexibility and strength
Razza, Bergen-Cico and Raymond	2015	3-5	29 children	25 weeks 10 minutes increasing to 30 minutes	Yoga	Parent survey Children's Measures and Tests	Improved delayed gratification Improved self-regulation No improvement in focussed attention
Garg et al.	2013	5-9 (special needs students)	51	12 to 26 weeks for	Get Ready to Learn Yoga	Teacher Report	Higher attention levels Improved self-regulation

				20 minutes a day			
Black and Fernando	2014	Kindergarten to Grade 6	409 children	Five weeks -	Mindful Schools	Teacher Report	Better self-control More prosocial behaviour Improved calming abilities Improved attention skills Improved self-control
Bubela and Gaylord	2014	3-5	27	Six weeks Once per week for 20 minutes	Hatha Yoga, sitting meditation, breathwork		Improved balance, flexibility and strength
Lam et al.	2015	14-16 students struggling academically	51	Not indicated	MBSR adaptation	Student report	Students found programme boring leading to designers to redevelop it
Flook, Goldberg, Pinger and Davidson	2015	preschool	68	Twelve weeks 2 times per week for 20 minutes	Kindness and adult mindfulness practices reformulated for preschoolers	Class measures Teacher observation	Delay of gratification Improved cognitive flexibility obsessive compulsive disorder and anxiety decreased significantly. Most students also reported the programme was helpful Improved prosocial behaviour Improved emotional regulation Less selfish behaviour More social aptitude
Schonert-Reichl et al.	2015	Fourth and fifth graders	100	12 lessons once per week for 40	MindUP (Mindfulness and SEL)	RCT Self-report dispositional	Greater mindfulness resulted in more

				minutes plus 3 min mindfulness exercises three times a day		mindfulness assessment EF task	accuracy in the EF inhibitory control tasks No differences were noted in children's salivary cortisol levels
Bernay et al.	2016	Primary students	124	8 lessons	Mental Health Foundation of New Zealand targeted at Maori children	SCWBS scale	Improved relationships, subjective well-being and cheerfulness
Lam	2016	4th-6th grade students	93 participants narrowed to 20 students with high levels of internalising anxiety	9 weeks	MBI		Less panic attacks Less OCD Students self-report programme is helpful
Poehlmann-Tynan et al.	2016	preschoolers	29	12 weeks	Self-regulation	RCT	Significantly improved attentional focus and self-regulation No change in empathy or compassion
Thierry et al.	2018	4-year-old		One year	Mindfulness	RCT	Improved EF
Wood et al.	2018	3-5	27		Mini Mind	RCT	Non-significant small to medium effects of executive functioning

Zelazo et al.	2018	Low-income preschool	218	Six weeks 30 lessons	Mindfulness and reflection	3 groups with different options Business as usual, Literacy or Mindfulness	No difference between mindfulness and literacy groups but both had higher EF compared with BAU

Appendix 2

Letter of Consent

Dear Parents,

I would like to inform you about an upcoming research project that will taking place in your child's school.

My name is Helen Maffini, you may know me as your school's education consultant. I will be leading the research as I am a doctoral student at the University of Bath in the UK. I have worked in the education field for over 20 years and am the co-author of the book 'Developing Children's Emotional Intelligence'.

The research project is on the topic of 'how does mindfulness training influences Hong Kong preschooler's well-being'. Mindfulness is linked to social-emotional learning and this research would like to learn the views of teachers, parents and children around this topic.

I would like to ask if you would be interested in joining this research project and to obtain your permission to participate in the study if you are interested. The study will occur over a six-week period beginning in early March. The project will be conducted in PN, PL and PU classes.

During early March to late April some classes will participate in three 15-minute mindfulness plus additional time for art and other related projects for six weeks. As part of this new curriculum several of the children's journal entries will be focused on mindfulness and kindness lessons and I would also ask for your permission to examine the journal drawings along with any scribed notes from the teachers of what your child said about mindfulness and kindness, as well as any classroom assessments, observations or documentation linked to this curriculum.

Parents who agree to participate will be asked to fill in two surveys as the beginning and end of the research phase to learn about their perceptions of mindfulness and their perceptions of their child's well-being before and after the mindfulness curriculum is implemented. In addition, I would also like to conduct a small group interview with a small group of parents which will take approximately 45 minutes and occur two times once on March 8 and once on April 20th.

Parents have the right to withdraw their permission at any time during the study without penalty by simply letting the researcher or school know. There are no expected risks with participation in this study. All individual results are considered confidential and will not be shared with any other persons. All data that identifies you by name will be destroyed after I have conducted the research and all names in my thesis will be pseudonyms.

This research study has been approved by the University of Bath. It is your choice whether to participate or not and you do not need to feel any obligation to do so. If you have any questions or concerns about participation in this study please feel free to contact me at [redacted]

If you agree to participate please fill in the permission form indicating so and return it in the envelope provided to the school office.

If you would like to participate please complete the attached permission form indicating whether you give permission to participate in this research study. Thank you in advance for your support of this research.

Yours kindly,

Helen Maffini

I _____(name) parent of _____ (child's name) in _____(class)

give permission/ do not give permission (please circle one)

to participate in the research study about how mindfulness influences Hong Kong preschooler's well-being conducted by Mrs. Helen Maffini through the University of Bath.

I also agree to /do not agree (please circle one) to fill in a survey at the beginning and end of the research.

I also wish/do not wish (please circle one) to be invited to the small group interviews before and after the research. (*Please note you may withdraw if the timings/dates are not convenient*).

I agree/do not agree for Helen Maffini to analyze my child's journal entries, child's voice scribed by the teacher, classroom assessments and other classroom documents as part of this study.

You may withdraw at any point by contacting the researcher or the school.

_____

Parent signature

Appendix 3

Letter of Consent

Dear Teachers,

My name is Helen Maffini and I am doctoral student at the University of Bath in the UK. I have worked in the education field for over 20 years and hold a Master of Education degree specializing in Early Childhood. I am co-author of the book 'Developing Children's Emotional Intelligence' and work with your school occasionally as an education consultant, so many of you may know me already.

I am currently planning research for my doctoral thesis on the topic of how mindfulness influences Hong Kong preschoolers' well-being. Your school has agreed to take part in the research. As you know a mindfulness curriculum will be implemented over six weeks which entails 15-minute lessons three times a week plus a longer lesson and other short moments of mindfulness.

I would like to ask if you are interested in participating in the study beginning in early March. The project will be conducted in NC, LK and UK classes. I am interested in learning about parent, teachers and children's perceptions and any benefits mindfulness might offer for the children in Hong Kong.

Participation would require filling in a brief pre and post survey about your class and then participating in a group meeting at your school pre and post for one hour to discuss more in-depth. I would also like to examine children's work, observations and other documentation from your classroom.

Teachers have the right to withdraw their permission at any time during the study without penalty by simply letting either myself for the school know. There are no expected risks with participation in this study. All information shared will be kept confidential. Your name will be changed to an identifier and all identifying data destroyed after the study. Names will be changed to pseudonyms in the study.

This research study has been approved by the University of Bath. It is your choice whether to participate or not and you do not need to feel any obligation to do so. If you have any questions or concerns about participation in this study please feel free to contact me at [redacted]

If you agree to participate please fill in the permission form indicating so and return it in the envelope provided to the school office.

Thank you in advance for your support of this research.

Yours kindly,

Helen Maffini

I _____(name) teacher of _____ (class) at _____(school name)

give my permission/ do not give my permission (please circle one)

to participate in the research study about how mindfulness influences Hong Kong preschooler's well-being conducted by Helen Maffini through the University of Bath. Including completing a pre and post survey and pre and post group interview. Documents from my classroom may be examined.

I may withdraw at any time for any reason by contacting the researcher or the school.

Signature

Appendix 4

Parent Pre-Survey: Mindfulness Curriculum Intervention

Parent Name: _____ Class:_____

Child's Name_____ Date: _____

Tick the **box** that matches where 1 is the least true and 5 is the most true.

	1 (least)	2	3	4	5 (most)
I am familiar with the term mindfulness.					
I practice mindfulness in my daily life.					
My child already practices mindfulness.					
I believe children need to learn skills to improve their well-being.					
I believe it is important for preschools to teach children to be kind.					
I believe it is important to teach children how to focus their attention.					
I believe children need to learn skills to improve their self-regulation.					
I believe that Hong Kong students experience higher levels of stress than students in Western countries.					
I believe children should learn to manage their emotions.					

Tick the **box** that matches the frequency. How frequently does your child exhibit the described skill or behaviour?

	Almost Never	Sometimes	Frequently	Almost Always
Concern for others/Empathy/Kindness				
Shares toys and materials with others				
Is empathetic toward others' struggles				
Voluntarily helps playmates who require it				
Respects others whose characteristics differ from him /her (sex, race etc.)				
Often feels concern for those who are sad				
Sometimes finds it difficult to see things from others' point of view				
When he/she notices a peer suffering does little/nothing to help				
Is kind to others				
Shows kindness to self				
Self-regulation/Focus				
Is able to control his/her temper				
Waits his/her turn during activities				
Gets upset easily				
Gets distracted by little things				
Gets fidgety after a few minutes if required to sit still				
Can concentrate on one thing at a time				

Indicate how frequently you have observed your child engage in the following actions.

Prosocial Behaviour	Never	Rarely	Sometimes	Often	Frequently
Other children seek your child out to involve him/her in activities					
Uses free time appropriately					

Shares laughter with peers					
Compromises with peers when a situation calls for it					
Initiates conversation with peers					
Listens carefully to adult instructions and directions					
Displays independent study skills where appropriate					
Appropriately handles aggressive behaviour from others (e.g. walks away, seeks assistance)					
Interacts with a number of different peers					
Can accept not getting his/her own way					
Attends to assigned tasks					

Indicate how frequently you have observed your child engage in the following actions.

Social Competence	Not at all	A Little	Moderately Well	Well	Very Well
Your child can accept things not going his/her way					
Your child copes well with failure					

Your child thinks before acting					
Your child resolves problems with friends or brother and sisters on his/her own					
Your child can calm down when excited or all wound up					
Your child does what he or she is told to do					
Your child is very good at understanding other people's feelings					
Your child controls his or her temper when there is disagreement					
Your child shares things with others					
Your child listens to others' points of view					
Your child can give suggestions and opinions without being bossy					

Comments (optional):

Survey questions adapted from:

Chi, B., Jastrzab, J. and Melchior, A., 2006. Developing indicators and measures of civic outcomes for elementary school students. Baltimore: The Center for Information and Research on Civic Learning and Engagement. Changes were made to this scale.

Conduct Problems Prevention Research Group. Parent - Social Competence Scale. 1995. Retrieved from the Fast Track Project Web site, http://www.fasttrackproject.org Changes were made to this scale.

McConnell et al. as cited in Dahlberg, L.L., Toal, S.B., Swahn, M.H. and Behrens, C.B., 2005. Measuring violence-related attitudes, behaviors, and influences among youths: A compendium of assessment tools. Atlanta: Centers for Disease Control and Prevention, (Report). Changes were made to this scale.

Novak, S.P. and Clayton, R.R. 2001 as cited in Tawana, B. and Moore, K., 2010. Assessing self-regulation: A guide for out-of-school time program practitioners Research to Results. Changes were made to this scale

Appendix 5

Teacher Pre-Survey: Mindfulness Curriculum Intervention

Teacher Name: _____ _____

Date: _____ Class: _____

Tick the **box** that matches where 5 is the most true and 1 is the least true.

	5 (most)	4	3	2	1 (least)
I am familiar with the term mindfulness					
I practice mindfulness in my daily life					
I believe mindfulness should be added to the preschool curriculum					
I believe children in Hong Kong need to learn skills to improve their well-being.					
I believe it is important for preschools to teach children mindfulness skills.					
I believe that mindfulness training can help my students.					
I believe my students need help with focus					
I believe my students need help showing kindness					
I believe my students can relax easily					
I believe my students show prosocial behaviour					
I believe that Hong Kong students experience higher levels of stress than students in Western countries.					
I believe preschool children should learn to manage their emotions					

Tick the box that is closest to the correct percentage of your class.

	all					half					none
	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
What percentage of your class currently show mindfulness characteristics?											
What percentage of your class currently show kindness towards others?											
What percentage of your class currently focus well on activities such as circle time or small group time?											
What percentage of your class can manage their emotions well?											

Comments (optional):

Appendix 6

Parent Post-Survey: Mindfulness Curriculum Intervention

Parent Name: _____ Class:_____

Child's Name_____ Date: _____

1. Tick the **box** that matches where 5 is the most true and 1 is the least true.

	1 (least)	2	3	4	5 (most)
I believe the mindfulness curriculum was beneficial for my child					
I would like my child to have more opportunities to learn mindfulness					

2.Tick the **box** that matches the frequency. How frequently does your child exhibit the described skill or behaviour?

	Almost Never	Sometimes	Frequently	Almost Always
1. Concern for others/Empathy/Kindness				
Shares toys and materials with others				
Is empathetic toward others' struggles				
Voluntarily helps playmates who require it				
Respects others whose characteristics differ from him/her (sex, race)				
Often feels concern for those who are sad				
Sometimes finds it difficult to see things from others' point of view				
When he/she notices a peer suffering does little/nothing to help				
Is kind to others				
Shows kindness to self				
2. Self-regulation				
Is able to control his/her temper				
Waits his/her turn during activities				
Gets upset easily				

Gets distracted by little things				
Gets fidgety after a few minutes if required to sit still				
Can concentrate on one thing at a time				

3.Tick the **box** that matches the frequency. How frequently does your child exhibit the described skill or behaviour?

3. Prosocial Behaviour	Never	Rarely	Sometimes	Often	Frequently
Other children seek your child out to involve him/her in activities					
Uses free time appropriately					
Shares laughter with peers					
Compromises with peers when a situation calls for it					
Initiates conversation with peers					
Listens carefully to adult instructions and directions during class					
Displays independent study skills where appropriate					
Appropriately handles aggressive behaviour from others (e.g. walks away, seeks assistance)					
Interacts with a number of different peers					
Can accept not getting his/her own way					
Attends to assigned tasks					
4. Social Competence	Not at all	A Little	Moderately Well	Well	Very Well
Your child can accept things not going his/her way					
Your child copes well with failure					
Your child thinks before acting					

Your child resolves problems with friends or brother and sisters on his/her own					
Your child can calm down when excited or all wound up					
Your child does what he or she is told to do					
Your child is very good at understanding other people's feelings					
Your child controls his or her temper when there is disagreement					
Your child shares things with others					
Your child listens to others' points of view					
Your child can give suggestions and opinions without being bossy					

Comments (optional):

Survey questions adapted from:

Chi, B., Jastrzab, J. and Melchior, A., 2006. Developing indicators and measures of civic outcomes for elementary school students. Baltimore: The Center for Information and Research on Civic Learning and Engagement. Changes were made to this scale.

Conduct Problems Prevention Research Group. Parent - Social Competence Scale. 1995. Retrieved from the Fast Track Project Web site, http://www.fasttrackproject.org Changes were made to this scale.

McConnell et al. as cited in Dahlberg, L.L., Toal, S.B., Swahn, M.H. and Behrens, C.B., 2005. Measuring violence-related attitudes, behaviors, and influences among youths: A compendium of assessment tools. Atlanta: Centers for Disease Control and Prevention, (Report). Changes were made to this scale.

Novak, S.P. and Clayton, R.R. 2001 as cited in Tawana, B. and Moore, K., 2010. Assessing self-regulation: A guide for out-of-school time program practitioners Research to Results. Changes were made to this scale

Appendix 7

Teacher Post Survey: Mindfulness Curriculum Intervention

Teacher Full Name: _____School_ _____

Date: _____ Class: _____

Tick the **box** that matches where 5 is the most true and 1 is the least true.

	5 (most)	4	3	2	1 (least)
I practice mindfulness in my daily life					
I believe mindfulness should be added to the preschool curriculum					
I believe children in Hong Kong need to learn skills to improve their well-being					
I believe it is important for preschools to teach children mindfulness practices					
I believe that mindfulness training helped my students improve their well-being					
I believe my class became more focussed					
I believe my class showed more kindness					
I believe my students were more able to relax					
I believe my students show prosocial behaviour					
I believe preschool children should learn to manage their emotions					
I believe the mindfulness training was beneficial to my class					

I would like the mindfulness training for students to be included in the school curriculum next year					

Tick the box that matches the closest correct percentage of your class.

	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
What percentage of your class currently show mindfulness characteristics?											
What percentage of your class currently show kindness towards others?											
What percentage of your class currently focus well on activities such as circle time or small group time?											
What percentage of your class can manage their emotions well?											

Comments (optional):

Appendix 8

Table 20: Initial Interview structure for Parent Pre-Interviews
I noticed from the survey data there is a range of knowledge and practice of mindfulness among the parents in the schools. Could you share your ideas about this question? For those that practice what does that entail?
Does your child practice mindfulness? If so, how would you say they do that?
Let's talk about what you would like your children to learn at school. What is most important for you and why?
Do you believe that children in Hong Kong experience more stress than in Western countries? Why do you think that is? What contributes to this stress? Do you think that schools play a role in reducing this stress, if any? How many activities is your child registered in after-school? How do you choose the activities?
Do you think preschools should teach how to improve well-being? What would be your focus and why? How to be kind? How to focus? Self-regulation? Empathy and concern for others? Which of these is most important and why?
What would you like to see happen in Hong Kong in terms of children's well-being? What part do preschools, schools, parents and government play? What are your concerns if any about children's well-being?

Appendix 9

Table 21: Initial Interview structure for Teacher Pre-Interviews
I noticed from the survey data there is a range of knowledge and practice of mindfulness among the teachers in the schools. Could you share your ideas about this question? If you practice when did you start and if not do you have any interest in doing so?
What concerns do you have about implementing the mindfulness curriculum? What ideas did you learn in the teacher training that you would like to implement? How do you think this new curriculum idea will develop in your school?
Let's talk about what you would like your students to learn at school. What is most important for you? Why?
Do you believe that children in Hong Kong experience more stress than in Western countries? If so, why do you think that is? What contributes to this stress? Do you think that schools play a role in reducing this stress? If yes, how? If no, why not?
How do you perceive the well-being of you students? Why? When we talk about your class, please give me some ideas or examples of how you class can and cannot focus, be kind, self-regulate, show concern for others
Do you think preschools should teach how to improve well-being? What would be your focus and why? How to be kind? How to focus? Self-regulation? Empathy and concern for others? Which of these is most important and why?
What would you like to see happen in Hong Kong in terms of children's well-being? What part do preschools, schools, parents and government play?

Appendix 10

Table 22: Initial Interview Structure for Parent Post-Interviews
Could you share your ideas and thoughts about the curriculum intervention? What did you like or dislike about it? Would it be beneficial to continue with this programme next year? Why or why not?
Did you notice any changes in your child during this intervention? Did you child discuss anything about the curriculum with you? Are there any changes you would like to see in this programme?
Did you use the parent cards? If so, were they helpful? If not, was there a particular reason why you did not use them? What else would you as a parent like to see to be more involved if this curriculum ran in the future?
Did you notice any difference in the following areas of well-being with your child? Focus and attention, Kindness, Self-regulation, Showing concern for others
What would you like to see happen in Hong Kong in terms of children's well-being? When we discussed student stress in the first meeting, many discussion points came up. Is there anything you would like to add or say regarding student stress now?

Appendix 11

Teacher Post-Interview Questions

Table 23: Initial Interview Structure for Teacher Post-Interviews
Could you share your ideas about the curriculum intervention? What did you like or dislike about it? Would it be beneficial to continue with this programme next year? Why or why not?
Did you notice any changes in your child during this intervention? Did you child discuss anything about the curriculum with you? Are there any changes you would like to see in this programme?
Did you use the parent cards? If so, were they helpful? If not, was there a particular reason why you did not use them?
Did you notice any difference in the following areas of well-being with your child? Focus and attention, Kindness, Self-regulation, Showing concern for others
What would you like to see happen in Hong Kong in terms of children's well-being? What part do preschools, schools, parents and government play?

Appendix 12

Excerpts of MindBE Curriculum Guidance Given to Teachers

Teacher Guidance for the MindBE Curriculum trial

The curriculum is run over 6 weeks and you will be doing 3 lessons per week which take between 15-20 min with additional 30 minutes per week allowed for to complete the art or additional reflections from the first three lessons. There are several assessments to be completed at the start and end of the curriculum as well as four journal entries.

Journal entries will follow the schools normal drawing/writing and scribing protocols and be completed in weeks 3,4,5,6 of the curriculum.

Assessments – there will be one individual and one whole class measurement during this 6-week implementation.

Assessment 1- Week 1 and Week 6 as part of the assessment for this curriculum offer children the opportunity to share stickers. Measure and note the number of stickers shared per each child. To complete this assessment, after pairing up the children randomly, one child in the pair should receive a bag with ten stickers inside (these will be provided to you by your Head teacher). Ask the students to share with their friend in whatever proportion they want, explaining they can keep them all, or given the all or divide them however they want. Teachers note the number of stickers the child gave to their friend on your tracking form. You can repeat this activity over the first week until all children had given their stickers out as they wished. You will repeat this activity in week 6 and note the new numbers of stickers shared by each child.

Assessment 2- Week 1 and Week 6 In your circle time, ask the class to list all the acts of kindness they can think of, create a list on poster paper or on the board and brainstorm until the children run out of ideas. (Teacher acts as scribe). Tally the number and input it on the kindness acts chart. Repeat this in week 6 and note the number of acts of kindness again on your tracker.

Mindful Moments – Incorporate mindful moments throughout your day where suitable

Mindful Moments

Mindful moments are the informal moments of mindfulness you share throughout the day. These are especially important, and in fact may be more important than the actual lessons. Each teacher, student and class are unique so how you build in your mindful moments will be different, but the sheet below will give you some ideas.

Mindful moments show that you as a teacher or assistant teacher are embodying mindfulness yourself. It is about noticing your own reactions and creating those pauses before overreacting or doing something you wish you hadn't. It's about helping build the habit and muscle of being mindful in yourself and your students.

Remember is mindfulness is about being – yes sometimes we do, but being is the essence, it's how you show up each day for the students in your class. As we know students mimic what they see and learn from how we are rather than what we say much of the time, so your own practice will be very crucial in being a mindful teacher!

Here are a few ideas to create mindful moments throughout the day!

- The Pause - several times throughout the day just take a pause with the children. You might remind the children to notice sounds or to take a breath. This is a great way to bring calm and focus to your classroom after an energetic period, such as PE or dancing and at the start and end of the day.

- Habits – create mindful habits in your class, for example, you might ring the bell to start the day, refocus attention or at any other period you feel suitable. Decide together with the children what the bell will mean and create a habit of using it.

- The Breath- It is often a wonderful tool to just stop and take a breath, when things are overwhelming, when things get messy, at the start of a new activity, to open and close your circle and other times you feel suitable. Create breaths such as breathing in smells, breathing out to cool -e.g. with pretend soup or use animals so breath in like lion and out with a roar etc be playful and help children develop their own favourites.

- Break time- When taking children to the toilet this can also be a time to be mindful. Ask the students to notice how the soap feels on their hands, how the water feels running through their fingers for example. For yourself, you

might take this time in your own break to just breath and focus on the present moment too.

- Transitions- These are great times to take a mindful moment with the class. Set an intention like let's feel our feet on the ground and walk silently and mindfully or pick something to notice- did you notice any smells? Any noises etc…

- Mindful Walks- If you have an outdoor area, going for a mindful walk with the children is a great way to promote noticing- notice sounds, things they see and smell….

- Activate the parasympathetic nervous system -ask the children to give themselves a hug, hold their own hand or rub their arms and teach them this is a great self-soothing ritual and it is equally as good for teachers!

- Reminders – sometimes just having a reminder object is enough to bring about a mindful pause or remember to take a breath- I like to carry a stone- yes just any stone in my pocket and when I feel it, it reminds me to take a breath or come back to the present. Children can hold a small object in their pocket or on their desk for such things.

- Using the mindful movement cards provided during play time or physical education practice some of the moves at the start or end of the lessons until this becomes routine.

- Share when you feel frustrated or overwhelmed and show the children how you rebalance or ground yourself with your breath. For example, oh dear I can feel myself getting tense because I am worried, we have a lot to do. Can you all help me to take a breath and settle myself down again?

- Calming jars- you can create these in art or on your own with clear jars, glitter, glue and water or use snow globes. Show children how our feelings can be all mixed up like when we shake it and watch the glitter or snow sink and calm. This can be used as a class or with individual students.

- Create a calm area or box in your classroom which is a quiet place. Place some of the following items mindful books, earphones with soothing sounds, lavender eye patches, comfortable seating, colouring in with detailed pictures, calming jars, a fish tank, Hoberman sphere, bean bags or sensory balls, timers, breathing prompts etc… allow children to visit during the day.

- Have any other ideas? Please share them during your weekly meetings.

Mindful Eating

Lesson Objectives
To use our senses to notice details about our food
To practice thinking about where food comes from and be grateful for the food we have and the people who helped to bring it to us
To monitor when we are full

During snack time use this to practice meeting the lesson objective above. Use any or all of the ideas on this sheet to bring about a mindful eating environment during snack time. Try to do this at least twice a week during snack time.

- Ring the mindfulness bell and take a deep breath in and out with the students. Tell the children today we are going to practice mindful eating. Explain that sometimes we may eat unmindfully by eating our food extremely fast. What happens? Yes, we might get a tummy ache! Eating mindfully means we pay attention while we are eating. Discuss how we know when we are full or still have room to eat. Let the children practice eating slowly and mindfully and then ask them to share anything they noticed.

- Give each student a raisin or slice of fruit. Ask them where they think the fruit came from. Examine the fruit closely. Look at all the lines and wrinkles on the fruit or raisin. Next, smell the fruit or raisin, raise it to the nose and take a deep breath in. Imagine this little raisin used to be a grape or a seed in case of fruit (show photo or pictures). Now ask the children to put the fruit raisin in their mouth and let it sit inside, really taste it and move it around in their mouth. In a circle discuss what you noticed about the raisins or fruit. How did it feel, how did it taste? Did the children like it or not? You can do this activity with any of the snack food provided by your school.

- At the end of the day, remind students of this mindful eating activity and ask them to try eating mindfully at home so that they can share their observations the next day. Then the next day, share an observation about something you ate as an example before asking students to share their thoughts.

- Before eating at snack time discuss the food and how it might have been grown and who might have helped in that process. Think about how nature provided the sun and rain and soil for the food to grow (if appliable) and how the farmers then harvested the food. Discuss how the food might have then travelled from the farm to the shop and then

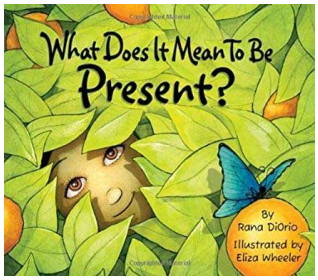
to your school. Who at the school then helped to prepare the food? Discuss and show appreciation for each of these steps and help the students to show their appreciation for how the food arrived to be there snack.

Lesson 1: Our Breath

Lesson Objectives

To be able to notice our breath
To be able to practice different breathing techniques
To introduce the words mindfully and breath

Materials needed: Hoberman Sphere, picture of lungs, Book What does it Mean to Be Present



Lesson Plan

Introduction

Gather in a circle. Ask children to sit mindfully, that means sitting up straight and paying attention. Model different ways of sitting e.g. mindfully and then slouched over etc.… Practice with the children sitting mindfully.

Read the story ‘What does it mean to be Present’. Discuss, ‘what it means to be present’ with the children.

Ask the children if they know what their breath is? Explain that breathing brings air in and out of our lungs. Show a picture of lungs. Explain that our lungs with our breathe can help us to be present inside ourselves. Point to our lungs on the body. Model the breath by breathing in deeply and breathing out deeply. Ask the children if they can do the same. Repeat a few times.

At the start, with breathwork, start slowly. For 2-3-years-olds -max 30 seconds, 4-year-olds max 40 seconds, and 5-year-olds max 50 seconds…. each week we will add 5-10 seconds over the curriculum. Adjust based on the needs of your class.

Activity

Ask children to look at the Hoberman sphere. Show the children how it is like breathing and how our lungs go in and out like the sphere does. Ask the children to hold the spheres (ideally one per child but you could pass one around).

Practice with Various Breath activities- these will be used throughout the curriculum. Choose one or two a day and encourage children to create their own too!

1. Imagine they are smelling in the lovely scent of a flower and then blowing off a dandelion. Repeat several times.
2. Breath in as though you are smelling a cup of hot cocoa and the blow out cooling the cocoa off
3. Use bubbles to breath in a deep breath and then exhale and blow the bubbles. Experiment with how the bubbles change as you breathe deeper or shallower breaths
4. Use your hand and fingers to trace the breath, up the thumb breath in and down the other side of the thumb breath out, up the index finger breath in and down the other side breath out and continue across all fingers – this can be called finger breathing or star fish breathing
5. Lie on the floor and place a stuffed toy on your belly, notice your breathing, breath in and out and try to keep your stuffed toy from falling off.

Closing

Ask the children how they felt when trying the different breathing exercises. Did they notice anything? Ask the children how they will be present today?

Lesson 2: Quiet and Sound

Lesson Objectives

To be able to listen for sounds in our environment
To be present in silent moments

Materials needed: Bell or chimes, tambourine, Hoberman sphere

Lesson Plan

Introduction

Gather in a circle. Ask children if they remember the many different breaths we experienced in our previous lesson. Ask if they remember using our breath to smell a flower and blow a dandelion (model this and show images or real objects if possible). Use the Hoberman sphere to allow children to follow their breath 3 times. Repeat any favourite breaths from last lesson

Ask the children if they were able to think of any fun breaths themselves? Explain that today we are going to see what we can notice when we pay close attention and are very quiet and still! Ask the children to guess what they think we might hear and create a list together. Give the children time to draw what they think they might hear.

Activity

Point to our ears and ask the children what we use our ears for. Ask the children to listen carefully and see if they can hear any sounds in the classroom. Can you hear anything? - breathing, rustling, people walking, other classrooms? Ask the children to put their hands on their hearts-can they hear their own hearts beating? Next, show children the bell or chime. Tell children you are going to ring the bell and you want them to listen until it stops ringing. Ask them to raise their hand when they can't hear it anymore. Have a few children volunteer to ring the bell and practice again. Try it with eyes open and then with eyes closed.

In your circle show the children the tambourine. Ask what it is. Pass the tambourine around the circle silently and carefully. After, ask the children what they noticed when the tambourine was going around. If children become restless in this process add in some movement by standing up and shaking the body out.

Closing

Ask children to recount the sounds they heard when they were quiet and still. Look at the lists they made and compare.

Lesson 3: Bubble Breath

Lesson Objectives

To notice the difference between long and short breaths.
To be aware of the breath.
To notice and name colours in the bubbles.
To be present.
To move mindfully

Materials needed: Bubbles and bubble wands for all children.

Lesson Plan

Introduction

Gather in a circle. Ask the children to close their eyes if they wish or to look at the floor Ring the mindfulness bell and listen. Raise hands once no more sound can be heard. Ask the children if anyone tried to listen for sounds at their home? Did they hear anything?

Ask the children if they have ever blown bubbles before. Ask the children to describe blowing bubbles--how do you do it? What do you see? Talk partners is a great way to develop this conversation, where one child explains to the other. Use a Hoberman Sphere to model our lungs going in and out, in and out. Use it as a guide to develop their breathing skills. Pass the sphere around for children to try it out. Ideally leave 5-6 Hoberman spheres in your play areas for play later on.

Activity

Go outside (if possible) or to a large open area and practice playing with blowing bubbles using your breathing techniques. Take deep breaths in and then blow out the bubbles. Play a variety of bubble games. Dip a wand into a bottle of soap bubble water. Holding the bubble wand about 4 inches from the children's mouth. ask the child to breathe in through the nose to the count 1…2…3. Then breathe out through the mouth to the bubble wand – 1.. 2..3. Regulating our out-breath is far harder than regulating in-breath. At first, the children will most likely see many small bubbles. Be playful and chase the bubbles and have fun. Ask, "What colours did you see in that bubble?" All the colours in the spectrum are in each tiny bubble. Go back to the wand. Breathe in with the children 1…2…3. Let the children breathe out to the wand – 1…2…3. What colours did your child see now? Go back again. Ask the children to blow long and slowly and watch as bigger bubbles appear. As the children master the outbreath, fewer and bigger bubbles will appear, and the colours will be more easily visible.

Closing

Ask the children how they felt when they were blowing bubbles. They might say happy, calm, relaxed or other ideas. Ask the children to share any ideas or things they noticed about blowing bubbles e.g. longer, slower breaths produce bigger bubbles. Offer bubbles in free play time. Introduce a mindful posture from the mindfulness cards and ask children to practice their favourite one.

Lesson 4: Being Kind

Lesson Objectives

To be able to describe being kind.
To be kind to others.
To notice and pay attention to how being kind makes us feel.

Materials needed:

Book: What Does it Mean to be Kind? Parent letter, an outline of a leaf.

Lesson Plan

Introduction

Gather in a circle. Ring the mindfulness bell and ask children to close their eyes and listen until they can't hear the bell anymore. Next, practice your breathing from your favourites so far, your bubble activity or other breathing you have done. Ask the children what being kind means. Write the answers on a flipchart. Read the story "What Does It Mean to Be Kind?" add any new ideas to your list.
Review the list of kind ideas together.

Activity

Create a kindness plant or tree. You can use a real plant (large) or create one with paper. Each time the children see or do something kind let them write or draw on a leaf and add it to the kindness plant. Spend one or two
minutes a day reviewing all the kind ideas added to the plant. Send home a leaf and ask the parent to also help their child write one kind thing they did at home on the leaf and bring it to add to the Kindness plant. Watch the plant grows with love and kindness.

Explain that sharing is one way to be kind. Think about different ways to share things. Give the children various items and ask them to share them with friends. At snack time ask the children to share the food. Explain how when we share, we are giving, then ask the student how that makes them feel? Children might indicate they feel good, happy or caring, for example. Write these words and post them in your classroom under a sign that says, “Sharing makes us feel....”. This activity is a good one to keep ongoing throughout your time together along with your kindness tree as it can bloom into something really special.

Closing

Review the different things we can do to be kind. Go around the circle and let each child say one thing about being kind or do talk partners and share ideas on being kind. In the corners leave materials to plan a kind activity for someone in need or someone who works at the school. For example, you might encourage children to write a thank you letter to the janitor or hold the doors open for parents who are collecting children. Explain that kindness spreads by being kind and even small acts of kindness are important.

Lesson 5: Body Scan

Lesson Objectives

To notice sensations in the body
To describe how the body feels
To play with attention

Materials needed:

Bell or Chime

Lesson Plan

Introduction

Gather in a circle. Ask the children to listen to the bell with their eyes closed. Raise their hands when they cannot hear the bell anymore.

Practice breathing by introducing finger breathing. Hold up a hand and practice following/tracing the fingers up to breath in, and down to breath out. Trace the whole hand for 5 breaths in and out. Repeat a few times. Tell the children that today we are going to pay attention to our bodies and the different feelings inside our bodies and see what we can notice.

Activity

Ask the children to stand up and make a circle. This can be forward or outward facing. Shake out the body. Then stand still. As the children how it feels in your body? Then ask the children to start at the top of their head and think about how it is feeling, is it light or heavy? What do they notice about how their head is feeling? Are their ears hearing noises? Can they hear their classmates breathing? How about their mouth is it dry or wet? Move down to the neck and shoulders. Shake our bodies out and be still again.

Ask them to relax their neck and shoulders, do some neck rolls and shoulder shrugs. How does that feel? Travel down the body, put their hands on their heart, can they feel it beating? Wriggle the arms out - what do their arms feel like? Does it tingle or feel limp or strong? Move down to the stomach. Notice any sounds or feelings? Does the stomach feel tight or relaxed? Can they hear any noises? Are they hungry? Shake out our body again.

Now ask the children to take a deep breath and relax their body. Next, move to the legs. Notice how they feel. Relax, then do a few bends and squats to help them relax. Lastly, feet and toes, wriggle and move them and feel relaxed. Now wriggle

your whole body. Discuss what the children noticed about their bodies. Is it hard or easy to be still? Practice wriggling then being still a few times. Can we notice anything inside ourselves when we are still? Keep this short and playful. Include lots of shaking out and movement so children are engaged.

Closing

Finish the session with the mindfulness bell again and on an outline of a body on a flip chart as children to describe anything they notice in their bodies and draw it on the picture.

Lesson 6: Being Kind to Ourselves

Lesson Objectives

To be able to name several emotions
To be able to identify several emotions
To know how to be kind to ourselves
To know how being kind makes us feel

Materials needed:

Happy and sad cards, bell, stuffed toy or doll, kindness plant or tree

Lesson Plan

Introduction

Gather in a circle. Use the mindfulness bell to signal the start of your mindfulness circle. Practice finger breathing. Ask they children which breaths are their favourites and practice some of them together. Ask children what emotions or feelings they can name. Make a list. Do they know what makes them happy or sad? Ask for examples. Give children happy and sad cards. Describe different situations and ask them to hold up the happy or sad cards and how they might feel. Explain it is ok to have any feeling. Discuss

1. Playing with a friend
2. Getting a hug from mommy or daddy
3. Learning something new
4. Breaking a toy
5. Eating a favourite food

Activity

Ask the children to reflect on how we can be kind to ourselves. Look at your kindness plant and see the different kindness leaves on the plant. Now ask the children to think about how to be kind to yourself. Show the children some pictures and ask the children if they think the pictures shows being kind to yourself or not.

1. Not going to bed on time so you feel tired the next day.
2. Eating fruits and vegetables
3. Praising yourself
4. Giving yourself a hug
5. Eating too much candy
6. Telling yourself you can't do it

Now try the activities that did show kindness as a group such as giving yourself a hug. Try to eat some fruit. Use a stuffed toy to model saying, "I am being kind to myself! I am eating healthy food. My body likes this! "Next, use the stuffed toy to model praising ourselves. Give high fives saying, "I can do it!" Ask the children to give themselves a hug! (wrap arms around themselves) and a pat on the back. Model with the stuffed toy saying "I like being kind to myself! It makes me feel good!" Discuss how doing these kind things for ourselves makes us feel using the emotions discussed at the start.

Closing

Remind the children we need to be kind to others, but we must also be kind to ourselves!

Extension: Create a book of pictures of being kind to ourselves. Each child can draw or write (teacher can scribe) and it can be collated in to a Be Kind to Ourselves Book

Lesson 7: Focus

Lesson Objectives

To be able to focus on an object for a sustained period
To be able to practice focusing
To use the words paying attention, being mindful,

Materials needed: one apple per student, basket, weather pictures

Lesson Plan

Introduction
Gather in a circle. Ask children to sit mindfully. Ring the mindfulness bell and ask children to listen and raise their hands when they cannot hear the bell anymore. Invite several children to ring the bell.

Discuss briefly how our minds can be like the weather calm or stormy and how that influences our feelings. Explain sometimes this makes us not be able to focus and we have thoughts racing around our minds. It is a good idea to have pictures of weather to use in this activity. Ask students to say how they are feeling linked to a weather image.

Activity

Explain today we are going to practice focusing by playing a game with apples. Show children the basket of apples. Pass around several apples and ask the children to examine them. What do they notice? Discuss the small details that make each one different, the shapes, colours, bruises, stems, markings etc.…

Give each student an apple. Explain they are going to study their apple until they know it very well and then they will try to find their apple again. In small groups of 2-6 let the children choose an apple. (Younger children may have an easier time in a smaller group) Using a timer of 1-2 minutes depending on age and class, let the children examine their apples. Ask the children to put the apples in the basket on the centre of each table. Ask for feedback about what the noticed about their own apple. After discussion ask the children to find their own apple again from the basket.

Closing

Ask the children if they could find their apple again and what was hard or easy about doing so? Did they notice things that they hadn’t noticed before? Scribe on a big

picture of an apple what the students noticed. As a follow up you could eat the apples for snack.

Lesson 8: Building Breath Work

Lesson Objectives

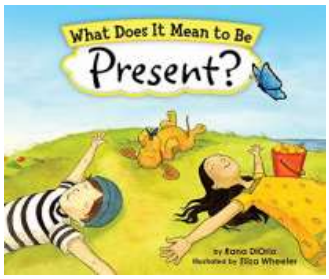
To manage our breath

To build more breathing skills

To learn what is means to be present

Materials needed:

“What does it mean to be Present?”, Pinwheels (6 or enough for a small group), Bell, Internet access and screen for children to watch video.



Lesson Plan

Introduction

Introduce the mindfulness circle with the bell. Ask a student to come up to ring the bell. Practice breathing as in previous lessons using children’s favourite methods. Read the story again ‘What does it Mean to be Present?’ Discuss what it means and how we can be present in class and at home. Make a list.

Activity

Show the children the video, “Sesame Street Belly Breath” which can be found here: https://www.youtube.com/watch?v=_mZbzDOpylA and share with the children. If you cannot access the video just practice belly breathing. Practice following the video and learning to belly breathe. Lie down and place a toy on tummies and practice breathing the toy to sleep with deep breathing.

Using pinwheels practice taking deep breaths in and out and making the pinwheels spin. Have children make their own pinwheels and use them to practice breathing.

Closing

Sitting back to back with a partner practice breathing, can you get your breathing in sync with each other? Discuss with the children what they noticed about the different types of breathing.

Extension: Sit in a circle and ask the children to go around and share their favourite breathing technique or invent their own. Allow playfulness and creativity!

Lesson 9: Being Kind to Others

Lesson Objectives
To know ways to be kind to others

To share loving kindness with others

Materials needed:

Screen and Internet.

Lesson Plan

Introduction

Welcome everyone with the mindfulness bell. Place hand on hearts and practice breathing. Note if any children in the class are absent. If they are, explain that their friend is not in class today, but we can still think about them. Ask the children to follow you and put hands on heart and send good thoughts to your friends who are not at school today. If you know they are sick wish them good health or if they are on

Watch the song, “Try Some Kindness:” https://www.youtube.com/watch?v=ZukLiEsIv0E. Discuss what being kind means.

Activity

Discuss various acts of kindness. Role play several acts of being kind, for example, helping someone carry something, complimenting a friend, or saying “Thank You” to your teacher. Write or draw how to be kind on a piece of paper and decorate it. Put the pieces together to make a classroom kindness quilt. Decorate the quilt and hang it in the classroom. For toddlers, give the attached quilt square with the word kind on it and they can finger paint or decorate it

First Journal Entry Ask children to draw what does it mean to be mindful? Scribe what they children say as you discuss the journal entry as per our normal journal writing exercises.

Closing

In a circle take time to read/acknowledge each child’s kindness patch on the quilt. Acknowledge the kind thoughts the child wrote or drew.

Extension: Send home a square and ask parents to also help to think about acts of kindness at home, then add these squares to the classroom quilts.

Lesson 10: Sensory Smelling

Lesson Objectives

To notice how scent can affect how we feel
To put together a lavender jar to use for calmness at home
Materials needed:
Small plastic jars- one per person, lavender leaves, cloth and elastic bands

Lesson Plan
Introduction

Practice the breathing again using children's favourites. Show the children some pictures of waves and clouds and ask how these pictures make them feel. Perhaps the words calm, relaxed etc may come up.

Activity

Show the children the lavender. Pass it around and smell it. Explain how it helps us feel calm. Make a lavender jar (follow how to make a Lavender Jar resource) as a demonstration and pass it around. Have each student make a calming jar with lavender that they can use at their desks or at home. For toddlers, prepare the jars for them and instead of cloth lids poke holes in the plastic lid that came with the jar.
How to Make a Lavender Jar
1. Give each student a non-breakable transparent jar.
2. Place dried lavender inside.
3. Cut out squares of thin cloth.
4. Place the cloth on the top of the jar with an elastic band.

Create jars with other calming, aromatic natural materials such as rosemary and peppermint (check for allergies first).

Closing

In a circle smell the different jars and notice what you smell and how it makes you feel. Ask the children if the smell reminds them of anything? Scribe the children's answers and allow them to discuss in partners whether they like the smell or not.

Lesson 11: Emotions

Lesson Objectives

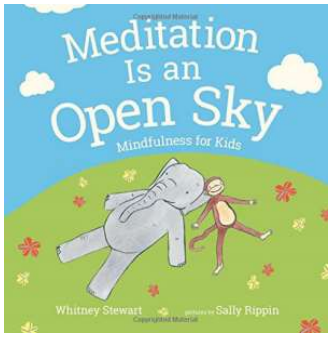
To be able to name our emotions

To know all emotions are ok

To learn to manage and accept emotions

Materials needed:

Persona Dolls Emotion fans; Book, “Meditation is an Open Sky: Bursting Emotion pp. 24-25, mirrors per child



Lesson Plan

Introduction

Gather in a circle. Ring the mindfulness bell. Practice breathing deeply for 3 counts. Ask the children about the different feelings they experience. Read the Bursting Emotion pages from “Meditation is an Open Sky.” Ask them if they know the words grateful and thankful. Explain that these are emotions that help us to feel happy.

Activity

In circle time, use a persona doll. Explain that the doll is feeling sad as her daddy is going away on a trip for 3 weeks. Ask the children if they have felt sad before. Share ideas. Explain that it is ok to feel sad and we all feel sad at times. Explain we don’t want to stay sad for an awfully long time, so discuss how we could cheer her up? Ideas such as changing your posture from hunch over to sitting up tall, smiling, getting a hug, dancing or talking to a friend or grownup are good ideas. Look at the physiology of when you feel happy vs when you feel sad and angry. How do we

stand, move and look? What expressions do we have on our faces? Do some mirror work to make different faces.

Make paper plate faces with different emotions. Provide a range of materials and let the children create and make different expressions and share what they are.

Closing

Explain when we are mindful, we accept how we are feeling. If we notice, we are feeling sad or angry we have strategies to change our moods, but it is ok to feel these things too.

Lesson 12: Love and Kindness Around the World

Lesson Objectives
To talk about what love means to each of us
To appreciate the people, we love and who love us

Materials needed:
Paper hearts

Lesson Plan

Introduction

Practice breathwork using children's favourite breaths. Discuss what love means. Ask the children to think about who they love and who loves them. Scribe on a chart. How does love make them feel? Pass around a heart shaped cushion or laminate a heart shape for the children to hold as they take turns with these questions.

Activity

Explain that we are going to learn how to share love with everyone. Give each child a heart and ask them to place it near there chest. Ask them to close their eyes and think about different people they love and to send them their love. If you have an absent classmate, you could send them love. Children may send love to grandparents in another country or to their friends. They can name whoever they would like. Next, decorate hearts to give or send to a person they love.

If you have international students, ask them how to say love in their language and practice as a class.

Closing
In closing circle time ask the children how love makes them feel and who they love. They could share the art they made and who it is for and why.

Journal Entry number 2 Ask they children to draw what does it mean to be kind in their journals. Scribe what they say their picture shows as per your usual journal writing activity.

Lesson 13: Calming Breaths
Lesson Objectives

To be able to feel and see our breath
To practice stillness
To use our breathing to relax
Materials needed:
Stuffed animals or small toys.

Lesson Plan

Introduction

Ask children to imagine they are blowing out the candles on a birthday cake. Breath in and blow out. Show a picture of a cake or a toy cake and practice as a class blowing in and then out.

Activity
Play calming music and have the children lie down
and relax. Place a stuffed animal on their stomach and practice breathing in and keeping the animal on their stomachs as they did in the belly breathing lesson. Do this for 2-4 minutes. Play music such as
waves, rain or meditation music you can find on YouTube. Guide the children to breath in and out, in and out to try to keep their toys on their chest. Ask them what they notice and f they could keep their toy on the stomachs.

Closing
Ask the children if anyone can describe how they felt in the lesson. Make a list of words (calm, relaxed, present, sleepy, etc.).

Extension: If you have naptime, lead children through relaxation
breathing and stillness at the beginning of naptime regularly.

Lesson 14: More Focus

Lesson Objectives
To practice focusing on details
To be able to recall and describe what we saw

Materials needed:
Bells, A tray with 5 to 10 objects on it and a cloth to cover it up

Lesson Plan
Introduction
Practice making noise and being quiet with the bells. Note that many things can be discovered when we are quiet and focused. Explain that part of being mindful is being focused. Tell the children we are going to focus on some objects quietly and see what we notice.

Activity
Show children a tray with 5-10 objects on it. Tell them they can look at it for 30 seconds and then you are going to cover it with a cloth. After it is covered ask who can remember what was on the tray. Older preschoolers can work in pairs to discuss with each other and make a list by drawing. Explain that is because those children who remembered were focusing and paying close attention!
If toddlers or younger children have trouble following this activity, try moving objects from one jar to another with tongs. This also requires focus and concentration

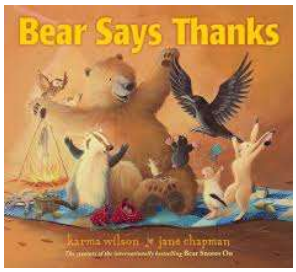
Closing
Discuss how focusing helps us to notice details and be mindful and present. What did the children notice when they were paying attention?

Extension: Talk about other times when children and adults have to focus, such as driving, as well how focus can help us really appreciate what we are doing, like when we are drawing or making music.

Lesson 15 Being Grateful

Lesson Objectives
To be able to express our gratitude
To listen to others, discuss what they feel grateful for

Materials needed:
Book Bear Says Thanks, shaped coloured paper, markers



Lesson Plan

Introduction

Read the book *Bear Says Thanks*. Explain that when we feel grateful it means we are thankful. When we are grateful our brain likes it and it makes us feel happy inside. Ask what things we could feel grateful for? Explain we can feel grateful for our parents taking care of us, for having a home to live in, for being about to come to preschool and having food to eat as examples. Make a list of items together on a flipchart paper.

Activity

Create a gratefulness wall. Help each student to write or draw (teacher scribing if needed) what they feel grateful for on different shapes. Post the ideas on a wall in the classroom with the banner “We Are Grateful.” To create a gratefulness mosaic

3rd Journal Entry Ask children to draw what does it mean to be mindful? Scribe what the children say as you discuss the journal entry as per our normal journal writing exercises.

Closing
In a circle have each student say what they are grateful for. Use an object such as a stone or feather to pass around during this activity. Whoever is holding the object speaks.

Extension: Practice saying "thank you" so that it feels natural. Try going around in a circle and giving children a chance to say "thank you" to someone for something specific, whether or not that person is in the room.

Lesson 16: Explorers

Lesson Objectives
To be able to use our imaginations to visualize a rich natural environment
To notice how exercise and movement makes our bodies feel
To be mindful of our volume and how we affect other creatures in our environment

Materials needed:
stone or rocks that look similar, or leaves, enough for one per child

Lesson Plan

Introduction

Form a circle. Ring the mindfulness bell and practice listening. Practice your breathing doing some of the students' favourites. Do some intense jumping or hopping for 30 seconds and then ask the children to place their hands on their hearts. How does it feel now? Can they feel it beating more strongly than at first?

Activity

Tell the children we are going on a safari to the jungle. Show pictures of the jungle and jungle animals. Tell the children we are going to have to be very mindful about how we walk and talk because we don't want to scare the animals away. Provide some dress up items such as binoculars, caps or magnifying glasses, cameras and then pretend to walk through the jungle. Walk slowly and purposefully, silently and with intention. Can you spot an elephant or a giraffe? Tip toe quietly and try to get a photo!

Place a range of leaves, stones or other objects somewhere during your hunt. Ask each student to collect one and examine it. Can they remember the small details?

Closing
Ask the children how it felt to be an explorer. In the circle ask the students to explain the details on their own rock or stone or leaf. In talk partners have the students examine the similarities and differences in their items.

Extension: If there is any wildlife on your campus (even birds, insects, squirrels), take children outside to try exploring the environment and observing creatures. Remind them to be mindful about their volume and how they move.

Lesson 17: Fresh Flowers

Lesson Objectives
To observe and be able to describe details on a flower
To recreate the visible features of a flower in a drawing
To focus on a task for a sustained time

Materials needed:
Fresh flowers- many different kinds (you might ask parents to send in one flower per child)

Lesson Plan

Introduction

Remind children of our breathwork and practice favourites. Model breathing with a real flower. Discuss the parts of the flower and what children can notice about it.

Activity

Give each student a flower. Ask them to breathe in deeply and smell the flower. Spend several minutes observing the flower and its smell. Ask the children to notice the tiny details on the flower and its stems and leaves. Next, give each student a drawing paper and crayons. Ask them to draw their flower noting down all the small details they noticed in their observation. In addition to how the flowers smell and look, talk about the textures. How do the petals feel? What about the stem and leaves?

Closing
Share drawings and ask each child to explain what they noticed. Put all the flowers into a bouquet and tie with a ribbon. Discuss who we appreciate at school that helps us. Let the children decide who to give the flowers too and ask two students to go and present the flowers (e.g. principal, cleaner, cook etc).

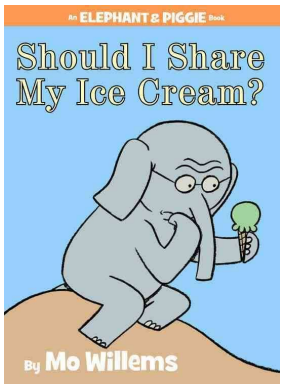
Lesson 18: We Are Kind

Lesson Objectives

To identify people in our lives and our school who support us with kindness
To acknowledge how the kindness of others makes us feel
To practice expressing gratitude

Materials needed:

Book Should I Share My Ice Cream? a piece of fruit from each student, ribbon, paper, crayons



Lesson Plan

Introduction

Practice listening with the bell and raising our hands when we can no longer hear it. Re the story Should I Share my Ice Cream and discuss how we can share. Ask the children to think about someone who helps your class at school, it might be a cleaner, bus driver, teaching assistant or other person. Discuss how this person helps your class.

Activity

Have the children arrange the fruit they brought in a basket and help to wrap it in cellophane and tie it with a ribbon. Ask the children to make thank you cards to attach to the basket too. Invite the person to class and present the basket to them, have each child state one thing they appreciate about the person aloud. In a circle invite the children to verbally thank the person for a specific thing they do to help.

Final Journal Entry Ask children to draw what does it mean to be kind? Scribe what they children say as you discuss the journal entry as per our normal journal writing exercises.

Closing
Remind children to show gratitude to the people who help them each day. Discuss how a kind word from another person can make you feel good and how we should share our grateful feelings.

Appendix 13

Sharing activity

RM ANOVA showed a significant effect of training on sharing, F=278.72 (p<.001), with higher results after the training, regardless of the age group, F=1.00 (p=.368). Effect size for training was very high (η^2=0.50) (Table).

RM ANOVA for training and age effect on sharing

	Age 3 (n=122)		*Age 4 (n=97)*		*Age 5 (n=68)*		*ANOVA*			
	Before	***After***	***Before***	***After***	***Before***	***After***	***Training***	***η^2***	***Training x age***	***η^2***
Sharing	3.08 (1.74)	4.93 (1.41)	3.32 (1.94)	5.02 (1.45)	3.01 (1.82)	5.13 (1.48)	F=278.72 (p<.001)*	0.50	F=1.00 (p=.368)	0.00

*statistically significant; results presented as M (SD)

Kindness Activity

RM ANOVA showed a significant effect of training on kindness, F=109.63 (p<.001), with higher results after the training, with no interaction of the age group, F=1.20 (p=.322). Effect size for training was very high (η^2=0.84) (Table).

RM ANOVA for training and age effect on kindness

	Age 3 (n=10)		*Age 4 (n=7)*		*Age 5 (n=7)*		*ANOVA*			
	Before	***After***	***Before***	***After***	***Before***	***After***	***Training***	***η^2***	***Training x age***	***η^2***
Kindness	11.60 (1.71)	18.60 (4.33)	12.71 (2.56)	22.57 (3.78)	13.86 (2.48)	23.00 (5.03)	F=109.63 (p<.001)*	0.84	F=1.20 (p=.322)	0.10

*statistically significant; results presented as M (SD)

Appendix 14

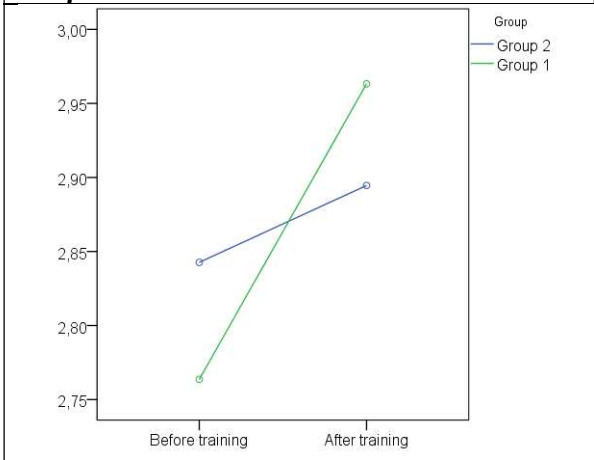
Parents' Pre and Post Test Data

RM ANOVAs for training and group effect on parents' results

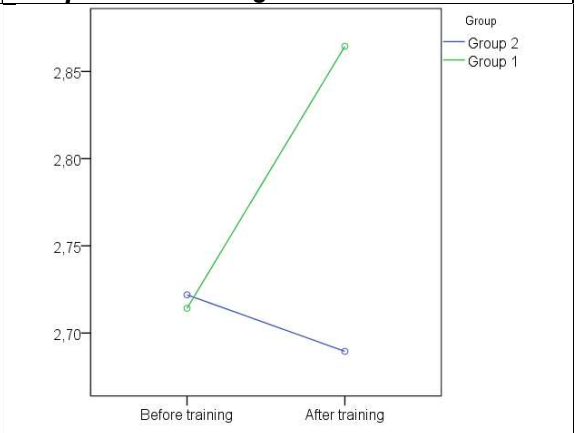
	Waitlist Group (n=73) No Intervention		*Intervention Group (n=278) Experienced Intervention*		*ANOVA*			
	Before	***After***	***Before***	***After***	***Training***	***η^2***	***Training x group***	***η^2***
Concern for others	2.84 (0.33)	2.89 (0.38)	2.76 (0.37)	2.96 (0.41)	F=18.46 (p<.001)*	0.05	F=6.36 (p=.012)*	0.02
Self-regulation	2.72 (0.44)	2.29 (0.35)	2.71 (0.42)	2.86 (0.39)	F=4.35 (p=.038)*	0.01	F=6.36 (p=.012)*	0.03
Prosocial behaviour	3.49 (0.45)	3.42 (0.53)	3.51 (0.46)	3.62 (0.46)	F=0.21 (p=.645)	0.00	F=7.64 (p=.006)*	0.02
Social competence	3.29 (0.49)	3.34 (0.49)	3.08 (0.53)	3.45 (0.51)	F=24.49 (p<.001)*	0.07	F=15.61 (p<.001)*	0.04

*statistically significant; results presented as M (SD)

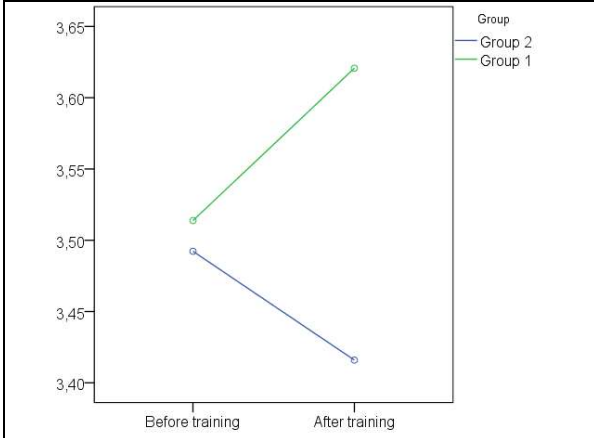
Graph 24: *Concern for Others*



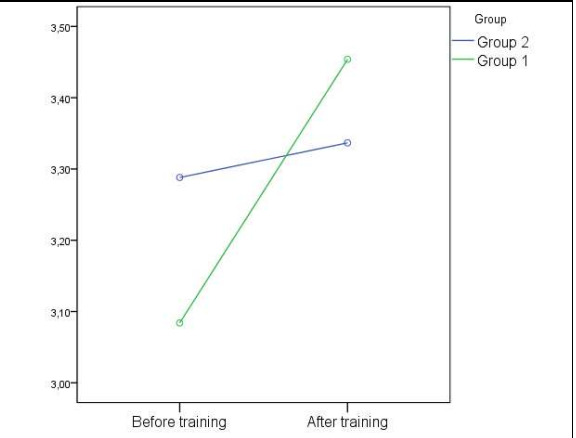
Graph 25: *Self-Regulation*



Graph 26*: Prosocial Behaviour*



Graph 27*: Social Competence*



Appendix 15

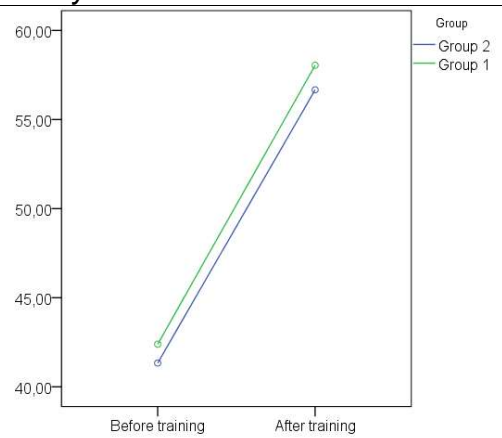
Teachers' Pre and Post Data

RM ANOVAs for training and group effect on teachers' results

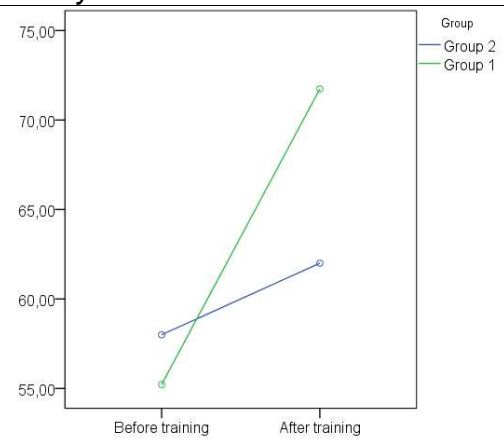
	Waitlist Group (n=15) No Intervention		*Intervention Group 1 (n=47) Experienced Intervention*		*ANOVA*			
	Before	***After***	***Before***	***After***	***Training***	***η^2***	***Training x group***	***η^2***
Mindfulness	41.13 (11.25)	56.67 (7.24)	42.39 (14.01)	58.04 (10.46)	F=81.07 (p<.001)*	0.60	F=0.01 (p=.926)	0.00
Kindness	58.00 (12.65)	62.00 (6.76)	55.22 (6.76)	71.74 (12.70)	F=48.43 (p<.001)*	0.45	F=18.03 (p<.001)*	0.23
Focus	63.33 (12.34)	62.67 (7.99)	57.39 (14.52)	67.83 (10.31)	F=9.53 (p=.003)*	0.14	F=12.30 (p<.001)*	0.17
Emotions	60.67 (11.63)	66.67 (11.75)	58.26 (16.37)	69.35 (13.57)	F=30.42 (p<.001)*	0.34	F=2.69 (p=.106)	0.04

*statistically significant; results presented as M (SD)

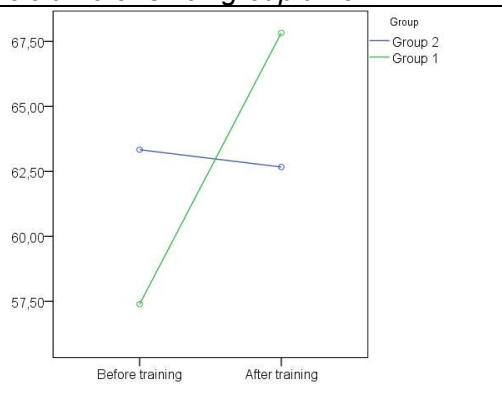
Graph 28 *What percentage of your class currently show mindfulness characteristics?*



Graph 29 *What percentage of your class currently show kindness towards others?*



Graph 30 *What percentage of your class currently focus well on activities such as circle time or small group time?*



Graph 31 *What percentage of your class can manage their emotions well?*